“Management accounting and value creation”

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ABSTRACT

This thesis presents an exploration of a branch of contemporary management accounting practice that is concerned with creating value for an organisation. Scholars within management accounting have highlighted the impact that such techniques have had in changing the practical landscape of organisational practices, but that paradoxically, there is a lack of corresponding empirical and theoretical knowledge about them. Therefore, this thesis examines these contemporary practices: firstly in a theoretical manner, through an examination of underlying theoretical influences, and secondly in practical contexts by analysing two case studies of implementation. The case studies adopt a critical realist framework to examine the extent and effects of accounting change stemming from the implementation of contemporary practice, arguing that within the case study organisations contemporary practices are not as divergent in their use as presented within the extant management accounting literature. Instead, empirical findings suggest that contemporary practices are representative of an extension of traditional management accounting logic. By utilising critical realism, an exploration of the socio-political context of these contemporary practices is also considered.

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ACADEMIC REGISTRY

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TABLE OF CONTENTS

Chapter 1: Introduction

1.1: Overview and Background of Thesis

The past decade in management accounting has witnessed an expansion of the number of special issues, articles, books, and conferences which have highlight issues of discontent with the directions of research and practice within the field, as well as a noticeable shift in the landscape of practical management accounting techniques. Following from Ittner and Larcker's (2001) typology of archival and survey research on value based management methods in management accounting, Zimmerman (2001) published a highly contentious follow up criticising much of the progress made in empirical management accounting research. Central to his arguments, was a conception of research-led theoretical development, where research is conducted in order to test and refine theoretical propositions; citing Kaplan (1984), Zimmerman claims management accounting research should not be practitioner-oriented, but rather closely oriented to economic modes research of theory-testing. This article led to a special issue of the *European Accounting Review* where the roles, purposes and means of management accounting research were debated (Hopwood, 2002; Ittner and Larcker, 2002; Lukka and Mouritsen, 2002).

Similar concerns over the nature and direction of academic management accounting have been revisited within recent years. A series of discussions on management accounting theory (for example Malmi and Granlund, 2009; and Scapens, 2006) opened up dialogue on what management accounting theory is, and what management accounting theory is not, however, the boundaries of management accounting in both theory and practice are unclear, as researchers have documented the numerous influences upon its development (see Puxty, 1993), as well as noting a divergence between the influences of theory and the developments in practice. Additionally, there is no consensus on what management accounting theory actually is; there is no over-riding or metatheory of MA. Within MA, theories are sometimes described as inconsistent (Luft and Shields, 2003), and borrowed (Laughlin, 1995), and at the worst extreme, theories and research in MA are stale (Otley, 2001), and suffer from a lost connection with practical needs (Mitchell, 2002), because it has continually emphasised accounting and lost a managerial perspective (Jonsson, 1998), has no reference to events in the practical environment (Mitchell, 2005), and concentrates on fads or fashion (Hopwood, 2002). In addition to critiques over usefulness of theory and research, similar instances amongst management accounting practice have been established, suggesting an aura of criticism covering contemporary management accounting. Yet, criticism and debate over practice is not new.

Indeed, much has been written since Johnson and Kaplan (1987) wrote their illuminating critique of management accounting practice in *Relevance Lost*. Amongst other criticisms, they debated that research and teaching was no longer relevant for the business environment and exemplified this position by highlighting the loss of global competitiveness of US companies. Following this, they advocated that more research be conducted into practice. In the years that followed, this call was met as research into practices and techniques flourished.

Since the issues were first raised, numerous techniques and branches of practice have been established, encompassing a shifted focus that seeks to complement traditional management accounting practice with, for example, considerations of strategic decision making (Roslender, 1995; Langfield-Smith, 2008), employee skills and competence (Kaplan and Norton, 1996) and even marketing (Roslender and Wilson, 2008). A chief development across these areas is recognised by some (Guilding *et al.*, 2000; Langfield-Smith, 2008) as representing a fundamental shift in the underlying theories and concepts of accounting, especially as management accounting becomes instilled with a strategic focus, and the role of management accountants has changed (Burns and Baldvinsdottir, 2005).

Some of these techniques have had a major impact on practice, with various commentators considering that they are now part of the conventional MA wisdom (Guilding *et al.*, 2000; Ax and Bjørnenak, 2007), and have been so influential that the traditional role of management accounting is perceptibly diminishing (Otley, 2008). However, scholars also malign the lack of empirical research into the practical usage of such new techniques (Lord, 1996; Roslender, 1996; Ittner and Larcker, 2001; Cuganesen, 2008; Langfield-Smith, 2008).

Consequently, what appears is a sense that traditional techniques are perceived to have been supplanted in organisations by contemporary practices, either recognised more broadly as examples of strategic management accounting (Guilding *et al.*, 2000; Roslender and Hart, 2003) or as new techniques with unique properties and prospects; but at the same time, we, as a research community, apparently know little about them and the reasons as to why they have become part of the conventional wisdom (see Langfield-Smith, 2008).

Indeed, what is known and documented about the growth and role of the new in management accounting is in flux – this has resulted in some inward looking critique of research. This debate extends into specific areas of 'new' practice, with scholars examining aspects of strategic management accounting (SMA) in practical contexts. For instance, Nixon and Burns (2012) suggest that despite the long history of SMA, techniques developed in the area may have a relatively short lifecycle, whilst paradoxically concepts and models associated with SMA have grown in use in managerial domains, appearing in professional publications and even consultancy practices. This difference between SMA in research and SMA in practice is also found with regards to 'newer' techniques (Zawai and Hoque, 2010), as well as 'older' techniques in the area (Lord, 1996). In turn, this leads to a sense of a lack of consensus as to what exactly constitutes SMA, which is somewhat of a recurring observation (Tomkins and Carr, 1996; Langfield-Smith, 2008), and one that is central to recent interventions that attempt to penetrate the long history of SMA (Langfield-Smith, 2008; Nixon and Burns, 2012). Hence the uncertainty suggested by some inherent within areas of new management accounting, are recognised in both theoretical and practical studies, yet no position of confluence has emerged, suggesting two things: firstly, the existence of an empirical knowledge gap concerning the development and deployment of new management accounting practices, and secondly that exploration of the possible reasons for this lack of agreement may be fruitful; certainly, examination of both theoretical and practical settings of the new management accounting may also be worthwhile in attempting to understand the appeal and practical application of new management accounting.

It is, thus, the aim of this thesis to bridge this gap, albeit partially, and to evaluate a particular branch of these newer techniques. The techniques that have been developed since *Relevance Lost* are numerous and it would take several theses to discuss them, as such this research project will focus on one area of these developments: Value Creating Management Accounting techniques (VCMA).

A statement by IFAC (1998) charted evolution and change in management accounting and proposed that the fourth and current stage of evolution was represented by a shift to the creation or generation of value through "the effective use of resources, through the use of technologies which examine the drivers of customer value, shareholder value, and organisational innovation" (para. 7). Widely influenced by developments in Value Based Management, these techniques have the general aim of creating value for the organisation, and as such are labelled in this project as VCMA.

Stemming also from ideas of strategic management accounting, VCMA attempts to delineate areas in which management accounting practices can contribute towards strategies of value creation by emphasising notions of value added and establishing which areas of the business yields greater firm value. Exemplar techniques in this area include value chain accounting, customer profitability analysis and strategic cost management as the focus of these three techniques is on identifying areas of the organisation where value is added. Under systems of customer accounting, for instance, value is added to the organisation through the tailoring of goods and service provision to specific customer groups, and offering this customisation at premium rates. Customer profitability analysis can therefore identify which customer groups are likely to deliver more value than others and subsequently, as a form of VCMA, the focus of management accounting shifts from more traditional concerns (of cost identification) towards newer or contemporary concerns (of aiding the implementation of value creation strategies). In so doing, various VCMA techniques adopt an explicitly strategic focus and can thus be identified as a subset of Kaplan's (1994) New Management Accounting; going further it would also be possible to identify a number of VCMA practices as falling within the remit of SMA (Guilding *et al.*, 2000; Guilding and McManus, 2002). For the purpose of this thesis, VCMA is taken as a collective term that denotes practices of management accounting that have the stated aim of creating value for the organisation, encapsulating a range of practices that have been developed since *Relevance Lost*.

In examining VCMA in a practical setting, this thesis draws upon methodologies of management accounting change in order to study the implementation of new practices in organisations, situating change as a central concern of study.

1.2: On Contexts of Management Accounting

The idea that management accounting operates within different contexts is one which has been discussed fervently throughout management accounting literature throughout the years (Burchell *et al.*, 1980; Puxty, 1993). A number of researchers have attempted to utilise different theoretical insights to explain the phenomena of management accounting innovation diffusion, and emerging from these divergent approaches is a movement towards a confluent understanding that management accounting in practice is not static, such that both the practice and diffusion of practices are highly contextual. Ax and Bjørnenak (2007) have suggested that techniques in a practical setting will vary significantly from their appearance and justification within academic contexts, suggesting, as noted elsewhere by some (Malmi and Ikäheimo, 2003), that there is somewhat of a gap in the (re)presentation of accounting in theoretical settings and its location in practice.

Similarly, techniques can be changed in various ways during practical implementation (see Ax and Bjørnenak, 2007). To elaborate on this, consider briefly the case of Activity Based Costing (ABC). Conceived of as an answer to the relevance lost debate ABC was initially offered as a technique for product costing where overheads were allocated on the basis of activity rather than on an arbitrary percentage based on labour or machine hours. The initial examples (see Cooper and Kaplan, 1988) given by authors focused on the manufacturing industry with ABC being used as a rationale for cause and effect overhead allocation and product pricing. Shortly after its introduction into academic papers, ABC was altered and authors (re)constructed ABC as a tool for, and not limited to, continuous improvement, customer profitability analysis (Foster and Gupta, 1994) and even benchmarking (Kaplan and Norton, 1996). ABC was also advanced as a strategic management tool in the guise of activity based management (Roslender, 1995), which was another practical alteration of ABC.

What arises from this is the idea that management accounting techniques can vary upon implementation, either as a result of technical or economic issues, or in context of cost management innovations through conflict with the goals and strategies of senior managers (McGowan and Klammer, 1997). This suggests that while technical aspects are presented as static and uniform techniques in the normative literature, actual practical aspects may change upon organisational use and implementation. Johansson and Siverbo (2009) note that technical aspects of novel innovations are not fully implemented by organisations; rather they undergo a series of evaluative processes, usually by senior-, or top-level participants whereby aspects of the technique are adopted based on organisational criteria. In their terminology, this process occurs at the selective stage of forming organisational routines, which are given precedence over potentiality, in that particular aspects of novel management accounting practices are implemented based on what the organisation requires in opposition to what is promised by the technique. Similarly Ax and Bjørnenak (2007) stress that particular elements of techniques are only ever applied within organisations, suggesting that there is a more contextual or piecemeal adoption of contemporarily developed practices. This further suggests that techniques may differ across organisations and contexts, and that there is a practical context to the development of practice. Concomitant to these suggestions, this thesis operates a similar distinction between theoretical and practical contexts of management accounting and attempts to examine theoretical differences and similarities between traditional and contemporary MAP, and in so doing contribute towards existing research on the nature of contemporary practice which could go some way to closing the knowledge gap that ostensibly exists regarding current practices (*cf.* Langfield-Smith, 2008).

However, whilst this distinction between theoretical and practical contexts has been acknowledged, there have also been fears expressed over the unchanging nature of accounting in practice (see Cooper and Hopper, 2007), in that contemporary forms of management accounting are witnessed to instigate fresh organisational tensions, as well as exacerbate existing tensions between capital and labour. For instance, recent techniques which are aimed at increasing shareholder value have been presented in this fashion as case studies have documented negative organisational changes resulting from the adoption and implementation of these new techniques (see Ezzamel *et al.*, 2008; and Cooper and Hopper, 2007 for an overview). However, an equally vocal and supporting body of cases contradict these fears, expressing a universality of potential for all prospective companies as implementation of new techniques are presented without problems and, at the same time, improve organisational and financial performance.

Research on the usage of contemporary practices is therefore conflicted; suggesting that there is an element of contextuality to the practical use of techniques, but equally that there may be particular enduring features of practice. And it is here that this thesis locates a research focus, and it is here where the study aims to make a key contribution.

1.3: Research Aims and Objectives

The primary aim of this thesis is to contribute to research on management accounting innovations and developments in both theoretical and practical considerations. On a theoretical basis, this is achieved by locating key differences and similarities in the theoretical influences of traditional management accounting practices, and the contemporary practices of value creation. On a practical basis, the thesis adopts a critical realist framework to examine how the adoption of contemporary practices might stimulate changes within the accounting function of an organisation, as well as to analyse how current practices might stimulate changes across the organisation, and hence to highlight the extent of any changes resulting from the implementation of contemporary practices.

In examining techniques in a practical setting, the thesis adopts two case studies and applies a critical realist framework to explore accounting and organisational change that arises from the implementation of value creating practices. In so doing, the thesis raises questions as to how to apply a critical realist framework to the study of accounting in a practical context, and specifically how critical realism may be used to examine organisational and management accounting change.

This thesis analyses how the implementation of management accounting techniques can cause internal organisational changes, which may also be the result of organisational and socio-political events. By conceptualising accounting as an active force in stimulating organisational change, the adoption of new management accounting practices allows impacts across organisational routines to be assessed. Consequently, the study of accounting change emerges as a central concern in the thesis.

Researchers within management accounting theorise change differently, with advocates of different research perspectives stressing the importance of different factors and features of accounting change. A key aim of this thesis is to examine features and factors of accounting changes in an organisational context, and thus to contribute to contemporary understanding of the mechanisms and features of management accounting change.

Secondly, the focus on accounting change allows for the study on how accounting practices and logic might diffuse throughout the organisation. This is achieved through a sustained analysis of how accounting might be embedded within modes of change across departments as well as the organisation as a whole. This is achieved by analysing the organisational changes that occur following the introduction of new management accounting techniques in two case organisations. A second aim, and contribution, of the thesis is thus present here: to conduct an analysis of how accounting change can contribute to organisational change.

The final main aim of the thesis is to study the consequences of accounting change. No adoption of novel techniques is replete with organisational harmony, nor is implementation a smooth process. In a research tradition too voluminous to summarise here notions of organisational resistance to accounting change has yielded important insights for the study of change, in that organisational actors (across all functions) can actively resist the adoption of new accounting measures. However, an equally large group of studies pose change as a process without resistance (Busco *et al.*, 2006). By following case organisations, and through employing a medium-term case study, perspectives on the internal processes of change and resistance are uncovered, as institutional and organisational influences clash over the course of accounting implementation and change.

1.4: Research Questions

In order to address these research objectives, the following research sub-questions can be formulated:

1. What are the theoretical differences between VCMA and traditional management accounting (TMA)?

2. What are the chief differences between VCMA and TMA in practical contexts?

3. How are VCMA practices implemented in organisations?

4. What, if any, are the socio-political changes in organisations as a result of VCMA?

5. And related to sub-question 4, above, to evaluate the prospect of an emancipatory intervention in the event of any negative aspects of socio-political change.

Fundamental to these aims is the adoption of a critical realist framework, which is outlined very briefly below.

1.5: On Critical Realism

The underlying research framework used in this thesis stems from critical realism, in particular more recent advancements and interpretation of Roy Bhaskar's work on transcendental and critical realism. For critical realist enquiry, the key tenets relate to the creation of knowledge, contextuality, causality, and a stratified ontology. Stemming from transcendental realism one of the key critical realist assumptions is that social reality is composed of real structures which exist both independently and separately from the events and observations they generate (Reed, 1997).

Specifically, realism portends that these real structures possess the potential to influence, directly and indirectly, observations of social reality:

"[Realism] posits a world of material and social objects or mechanisms possessing powers or capacities which generate or cause both natural and social phenomena to behave in certain ways rather than others" (Reed, 1998: 212)

For critical realists, this recognition that the social world is made up of objects and mechanisms has direct implications on the creation and maintenance of knowledge and the nature of social reality. Addressing firstly epistemological claims, critical realists distinguish between transitive and intransitive knowledge. These aspects are clarified in chapter 4.

Drawing parallels with Marx's writings on ideology and false consciousness, Bhaskar (1986) also postulates that social sciences generally are not neutral, that, instead, they contain notions of emancipation as social sciences do not consider social phenomena as abstracted from the context of investigation such that they investigate social practices alongside the social structures which create and maintain them. Critical realism as conceptualised in this vein, also has an underlying emancipatory impulse. Since critical realist examination can reveal ways in which structures can produce oppressive effects, Bhaskar (1986) has noted that critical realists in this role of exposure can find the causal mechanisms which lead to oppression and can thus prescribe emancipatory solutions.

However, this emphasis upon emancipation has been criticised by critical realists (Cruickshank, 2003), organisational researchers (Willmott, 2005), and feminists (Barker, 2003; Nelson, 2003) who find the aims of critical realism and ontological openness to be useful, but that they do not go deep enough, and even simply through a reliance upon humanist conceptions of human agency (Barker, 2003). Consequently, in addressing this lack of sustained or consistent emancipatory focus from critical realism, insights are provided from the critical accounting project, of which there are recent foci on drawing out conditions and possibilities of emancipation (see, Gallhofer and Haslam, 2003).

Therefore, the project as a whole engages in a multi-paradigmatic approach to research, encapsulating a methodologically pluralistic perspective in marrying critical realist epistemology and ontology with the underlying emancipatory axiological position of critical accounting, which has roots in critical theory. It is hoped that embracing the critical accounting project will address the lack of satisfactory emancipatory mechanisms or lenses that reside in much recent critical realist propositions. Furthermore embracing numerous “paradigms” yields a more complete view of management accounting (*cf.* Mingers and Brocklesby, 1997), particularly as issues that are typically the subscription of “alternative research” (see Baxter and Chua, 2003), such as labour-capital conflict, come to the fore in evaluating the comprehensive facets and drivers of management accounting change. This type of multi-perspective research approach to management accounting has been encouraged within the literature (see Lukka and Mouritsen, 2002).

To some extent, the critical realist framework advanced here is representative of the methodological positions of Laughlin, particularly those stressed in later research (Laughlin, 2004) whereby the choice of ontology and theory deployed within methodology has ramifications for the role of the researcher. For Laughlin (2004) the interpretivist researcher follows a framework that ignores any theory prior to the research process, and allows research participants’ experiences to form the complete empirical structure of the research process.

This distinguishes critical realism from interpretivism, as the critical realist researcher adopts a position that aligns with Laughlin’s (1995) middle range thinking, in so doing evaluates decision-making processes within social systems, but roots this within some forms of pre-existing theory. This prior theory becomes relevant to structuring the empirics of a project in that this theory provides some skeletal theory that shapes the nature of observation. Laughlin considers that observation might focus on hegemonic issues within the processes and outcomes of phenomena, broadly corresponding to a critical realist position which would question the status of pre-existing knowledge; a notion stressed by Bhaskar's writing on the prominence of particular forms of knowledge within science. Interpretivism would therefore ignore this knowledge and fail to question it in presenting an examination of accounting change.

Thus, a critical realist framework also encapsulates the aims of the fourth research sub-question; that of socio-political aspects of practice, which has been identified as being an important feature of MA (Cooper and Hopper, 2007), and enables a deeper comparison between VCMA and TMA to emerge.

1.6: Case Companies and Findings

The evaluation of practical contexts of VCMA was undertaken through a critical realist case study of two organisations, referred to in this thesis as EquiGrow and System Solutions Incorporated (SSI) respectively.

EquiGrow is a UK subsidiary of a European owned financial services company. The company, globally, employs around 35,000 people, whilst there are just under 4,800 employed in the UK. SSI is a UK subsidiary of a US owned and controlled computing company that develops and sells both software and hardware components, as well as IT services.

Both have embarked upon value creation strategies for different reasons; EquiGrow have implemented strategic growth and market share strategies, whilst SSI have followed market growth strategies in order to boost revenues and profit reserves, owing to poor performance since 2001. For SSI, value creation is implemented to curtail the effects of value destruction brought on by a loss of competitiveness in the global IT and software market.

Empirical research in both of these cases highlights that value creation is increasingly used in practical contexts to achieve differing aims, such that the demarcation of VC type initiatives are unclear; furthermore, the divide between traditional and contemporary practices in both organisations is jagged and sketchy, in that SSI have implemented various VCMA initiatives to complement the existing focus of their accounting and information systems and management control systems. For instance, supplier scorecards as a contemporary form of supplier management incorporate several traditional accounting measures as key performance indicators. Equally this observation holds in EquiGrow whereby "newer" forms of customer management have supplanted traditional customer relationship practices and this has been facilitated by an increased reliance upon customer lifetime valuations concepts alongside traditional foci across departments upon efficiency and value for money.

Whilst case materials and interview data points towards a coexistence of sorts between the espoused competing logics of traditional and contemporary management accounting, there are a number of pervasive effects of this confluence. To be brief in their recount here, the most enduring aspect is an increased commodification of relationships between the organisation and interest parties. For instance, for EquiGrow, the main usage of VCMA has been to overhaul their customer management process and related accounting and IT practices in this regards. As Vaivio (1999) notes, the creation of a calculable space in an organisation facilitates a shift in how the customer is perceived. Previous research in this area has also documented this phenomenon and during the research phase of this thesis, EquiGrow's VCMA endeavours pointed to an increased commodification of the customer and quantification of the customer relationship which has been documented elsewhere (Boyce, 2000; 2002; Bourguignon, 2005). For SSI, this process has been noted in reference to the employee relationship and the customer relationship. Consequently, following cross-case analysis, attention is drawn to these more negative aspects of VCMA, and by engaging with the emancipatory undertones of a critical realist framework contextual forms of emancipatory accounting are suggested.

Building upon Roslender and Fincham's (2004) engagement with intellectual capital self-accounting and by utilising insights from marketing literature, notions of narrative customer accounting and employee accounting are traced. Furthermore in order to de-commodify these relationships, alternative or counter uses of contemporary accounting practices are discussed; concomitant with post-workerist and post-marxist movements, the aim is to seek emancipatory intent by problematising VCMA's focus on classifying immaterial labour as material labour. Consequently, this thesis also poses insights on the socio-political differences between TMA and VMCA.

1.7: Structure of the thesis

The thesis is divided into nine chapters, and excluding this chapter is presented as follows:

Chapter 2

This chapter highlights the development of newer techniques and associated branches of contemporary practice. Beginning with an overview of the academic criticisms levied at the lack of practical research in the late 1980s, the chapter provides an overview of the practical developments that arose out of the criticism. By focusing on the concept of the New Management Accounting, the chapter traces such practical developments in order to highlight examples of techniques from the extant literature. Extended consideration is also given to TMA and the influence of neo-classical economics on the progression of traditional approaches is outlined through the development of a framework for evaluation which is replicated in chapter 3 when attention is drawn to the theoretical characteristics of contemporary management accounting practices and techniques.

Chapter 3

This chapter analyses contemporary notions of management accounting techniques which focus on value creation (VCMA) as a specific example of contemporary practice and evaluates how it is presented in the academic and practical literatures. Analysis is achieved through content analysis of key papers and relates findings to the identified underpinnings of TMA, so that it might be possible to tease out the underlying theoretical characteristics, and hence influences, of VCMA. At the theoretical level of VCMA, such ideas and underlying theories are compared to those of TMA in order to discuss where similarities and differences exist. Consequently this chapter responds to the first sub-question of the thesis.

Chapter 4

This chapter explains the research methodology of the thesis, which follows a critical realist framework. Through this framework, as outlined above, knowledge is seen to be partial and contextual owing to the emphasis placed upon ontological stratification. This episode of the thesis firstly outlines the main underlying assumptions of any research project, clarifying notions of epistemology, ontology and axiology respectively. These three elements are then explained by reference to the main research perspectives available to a social science researcher, that of positivism, interpretivism, critical theory, and postmodernism. These general approaches are then distilled into specific perspectives upon accounting change and compared to a critical realist framework. I argue that whilst each of these approaches have contributed to an understanding of accounting change, none of them adequately captures the process of change as each is too narrow in focus to delineate drivers of change; for instance positivist research ignores social and political factors by locating change internal to the organisation as demanded by technical needs; interpretivist research on accounting change has the opposite focus by neglecting organisational influences and primarily construes change as the result of complex social arrangements between the organisation and the environment in which it operates; finally alternative research - broadly include critical theory, poststructural perspectives, Marxist and labour process theories - place a great stress upon social and political factors, but still largely neglect technical aspects of change. I argue that by construing organisational routines as work, it is possible to discuss the causal effects of a change in strategy and the implementation of new accounting techniques upon said organisational routines. Utilising critical realism, this process distinguishes work as a relation social phenomena which is not detached from its original context, allowing specific concepts and theories of change to be formulated. Furthermore, as critical realism distinguishes generative mechanisms of change from background events (which have not yielded any causal influence upon organisational routines), it is also possible to discuss the interplay between social and political contexts of the organisation and work; in other words it is possible to discuss the social and political influences upon the organisation and its accounting practices in order to explore whether such influences directly and causally inhibit or stimulate accounting change.

Chapter 5

This chapter presents the case study of EquiGrow and examines how VCMA have been used in a practical context. The first case company is a financial services company, with a familiarity to some VCMA. The case focuses on interview responses from practitioners and recounts their experiences and perceptions of how VMCA currently operates in their organisation and how their daily work routines have changed due to the implementation of these techniques. Since a critical realist framework portends to multi-level analysis, interviews with senior accountants, other organisational participants and financial analysts were conducted in order to, per the aims of critical realism, provide a deeper understanding of the nature of management accounting change, and examine how structures and agency may be implicated in the change process.

Chapter 6

This chapter has the same broad aims as the previous chapter and presents findings of SSI. Interviews were conducted with management accountants across the organisation including those with only recent experience of the organisation, to senior accountants, in order to be consistent with the aims of critical realist and multilevel analysis. Taken together, chapters 5 and 6 provide the empirical basis on which to explore sub-questions two and three. An elaboration of commonalities in both cases is presented in chapter 7.

Chapter 7

Following from the case studies, this chapter evaluates the experiences of interviewees and analyses the nature of VCMA. By comparing their perceptions with findings from previous research on TMA and VCMA in a practical realm, key differences and similarities will be identified and allow the research project to reach a position on whether or not VCMA operates any differently in practice to TMA.

Chapter 8

Following from case findings, implications of any differences and similarities between TMA and VCMA are discussed. Owing to the commitment to a CR framework, issues of socio-political dimension of practice (and of accounting change) are highlighted within, and management accounting change is discussed with reference to the structure-agency dualism of CR. Pertinent to the emancipatory impulse of CR, focus is drawn to issues that raise questions over negative socio-political changes within both case studies. This relates to the fourth and the final sub-questions of the thesis.

That case findings pointed to similar issues and criticisms from the literature, provided scope to visit the emancipatory impulse of critical realism. Furthermore the recent movements in emancipatory accounting are discussed to provide insights into this research project. The main thread arising from this overview is the progression of notions of self-accounting and ideas of orthopraxis relating to creation of value.

Chapter 9

The final chapter concludes the research project by showing how insights from a critical realist approach have uncovered key differences and commonalities between TMA and VCMA in practical settings. The main research problem stated in the introduction and subsequent chapters of this thesis was to analyse contemporary modes of management accounting, specifically techniques of value creation, in order to evaluate any technical and practical differences between these contemporary techniques and traditional modes of practice. The aim of doing so is to highlight any changes arising from practical implementation to evaluate the current role and usage of management accounting practices in organisations. It is in this sense that the project makes its main contribution to the existing body of knowledge.

This thesis is not without limitations. For example, given the specific focus on contextuality the results of the project may not apply generally to each organisation. These limitations will be elaborated in this chapter, resulting in a discussion of how further research might overcome them and provide avenues for developing the findings in the thesis.

Chapter 2: Of Difference

2.1: Introduction

This chapter introduces the main themes of how technical developments are perceived within the management accounting community. It begins with a discussion of change and unhappiness at the lack of change in the 1980s, and then situates novelty and innovation in management accounting within this debate. The underlying tensions are exposed on the perception of traditional techniques and how contemporary practices are presented. Alongside this, underpinnings and key theoretical influences of traditional practices are highlighted. The chapter concludes by noting the intention to conduct a similar analysis on contemporary practices in the following chapter.

2.1.1: Climates of Management Accounting Research

In the preface to volume 3 of *Handbook of Management Accounting Research*, editors Chapman, Hopwood and Shields (2008: ix) praise the diversity of research in the area of management accounting, noting specifically the multiple modes of inquiry and intellectual endeavours that characterise much of what we contemporaneously equate with the term management accounting. Alongside this, in recent years, there has been an expansion to the research canon with a proliferation of publications centred on the promotion and advancement of new practical techniques, and empirical examinations of their collective efficacy in organisational contexts. This wide ranging theoretical and practical research of management accounting techniques focuses on the apparent "newness" of theory and practice and despite the praise and acknowledgement offered by some scholars, some tensions exist in the literature between what techniques and practices are, ostensibly, purposeful for organisations in the current business environment. To be sure, some underlying issues of tension are repeating fears and concerns expressed by scholars in the late 1980s; consequently, it would be prudent to introduce the historical underpinnings of this contemporary tension.

2.1.2: The Practical Realities of the 1980s: Paradise Lost?

"Cost accounting is wrecking American Business. If we're going to remain competitive, we've got to change" (Pryor, 1988, quoted in Shank and Govindarajan, 1989: x)

“Corporate management accounting systems are inadequate for today’s environment” (Johnson and Kaplan, 1987: xi)

The 1980s witnessed numerous critiques of management accounting systems and management control systems, with critique aligned to a sense that contemporary accounting was no longer purposeful, a view adequately captured through Shank and Govindarajan’s (1989) introduction to their text on a new form of management accounting in which they outline professional discontent with traditional models. Retrospectively this emerged as a dominant critique, and is enunciated at great length in perhaps the most damning criticisms found in the seminal publication by Johnson and Kaplan (1987). In *Relevance Lost*, it is argued that management accounting has lost its way, and specifically that then-contemporary techniques offered no relevance to the needs of managers in the mid-1980s. Moreover, they claim that there have been no major innovative practical developments in management accounting and provide evidence that suggests companies, at the time, were using the same techniques and practices that have been used widely for at least sixty years. Their arguments centred on the changing social context of American firms, characterised by rapid technological developments and shifts in the intensity of local and global competitiveness. Through these changes, particularly in the increase of global competition, these firms had lost competitiveness and financial performance was suffering. This global loss of competitive position was argued by Johnson and Kaplan as directly attributable to weaknesses in these organisations’ management accounting systems, as techniques and practices in use were not providing relevant information to managers for decision making purposes. Johnson and Kaplan further argued that this lack of relevance was symptomatic in the subservience of the role of management accounting to the rise in importance of financial accounting measures to managers and organisations, leading to a widespread decline in not only the relevance of management accounting systems, but to their organisational value also, since traditional techniques were developed and implemented during periods of relatively consistent levels of competition and against the backdrop of a stable business environment.

Drawing parallels with Japanese competitors, *Relevance Lost* traces the developments of costing techniques and cost management procedures of General Motors and American firms in general, and proposes that no new techniques were developed beyond 1925, and that these companies were still using these techniques in the 1980s.

However, their Japanese counterparts were gaining competitive advantages on a global scale, and were utilising management accounting practices with a contrasting focus upon continuous improvement, such as Total Quality management (TQM). Whilst performance measures in General Motors were heavily financial, TQM was perceived as a management philosophy involving increased instances of non-financial performance measures coupled with shifts in the roles of management accountants who emerged as business analysts rather than their American counterparts who were conveyed as support staff using management accounting information to provide inputs to the decision making processes of line managers.

Understandably, the conclusions proffered by Johnson and Kaplan (1987) generated much controversy, which is acknowledged in later editions of *Relevance Lost* (Johnson and Kaplan, 1991) and subsequent publications (Johnson, 1994). For some commentators (for example, Noreen, 1987), the comments represented misspecifications of management accounting, and criticisms primarily related to technical aspects of Johnson and Kaplan's recommendations on how to increase the relevance of management accounting. On the other hand others questioned the historical perspective taken by Johnson and Kaplan in deliberating the development of management accounting as a discipline and as a set of organisational accounting practices (see Vollmers, 1996).

However, following the publication of *Relevance Lost*, a series of practically-oriented research projects was published, particularly empirical studies on accounting practices which were largely the concerns of survey and case study research (Scapens, 1993), in addition to the discovery and development of new techniques. Case study research in the aftermath of *Relevance Lost* represented an attempt to understand the nature of management accounting practice, particularly in the UK, where the effects of a loss of competitiveness was not as pronounced as Johnson and Kaplan had urged. Much of this research focused on the use of management accounting information, and specifically how cost information is used within organisations and how it might be used to overcome perceived deficient accounting practices.

Sentiments expressed by Johnson and Kaplan were echoed in 1989 by the American Accounting Association (AAA) who held a symposium to explain the inadequacies of TMA, uncovering a general malaise amongst professionals for traditional practices which culminated in the emergence of a common theme related to moving away from the perceived failures of traditional accounting performance measurement techniques towards new tools (Chenhall and Langfield-Smith, 2007). This view was not endemic to performance measurement systems and techniques, as other critics focused on issues in cost accounting also (Cooper and Kaplan, 1988; Shank and Govindarajan, 1989; Foster and Gupta, 1994), postulating that cost accounting acted as an inhibitor to competitiveness, and portrayed simplistic and inaccurate conceptions of operational issues. Accordingly, traditional management accounting practices were the topic of much criticism and debate in the mid to late 1980s.

Normatively, critics, particularly those at the AAA symposium (see Chenhall and Langfield-Smith, 2007) felt that measures should be driven by the need to satisfy the customer and that measures should link closely to the strategy of the organisation. Intrinsic to this prescriptive perspective was a focus on strategy, which was felt to overcome perceived deficiencies in traditional models identified at the symposium. Indeed, notions of strategic positioning were widely identified as an important and necessary component in developing new forms of management accounting. Collective critique, as outlined above, served as an anchor in providing an agenda for practical research to develop a range of "new" techniques that would overcome weakness of the old and traditional. Such an agenda was offered by Kaplan (1984), which focused on directing research towards providing solutions to new challenges, and subsequent developments have formed part of the New Management Accounting written about by some in the mid-1990s.

2.2: Rise of the New Management Accounting

The term New Management Accounting (NMA) was used by Kaplan (1994) in his summary of techniques and practical developments that appeared in both academic and practical literatures since the criticisms of the 1980s. Operating as a blanket term, NMA refers broadly to the practical developments in management accounting practice that Kaplan was involved in, namely: activity based costing, operational control systems, and the balanced scorecard. Outlining the key underlying influences on the development of these techniques, Kaplan notes general shifts in the conceptual groundings and rationales of management accounting practice. To expound; Kaplan's research into practice following the publication of *Relevance Lost* introduced into the literature notions of activity based costing (as discussed in Cooper and Kaplan, 1988), where a clear connection was made to continuous improvement activities in that accounting systems not only sought to report and communicate costs, but also imparted some measure of control over these costs in order to improve operational processes. The logic of such a position stems from the focus of ABC on clarifying the activities which incur costs; if managers know the cost of a set-up time, then they are in a position to aim to reduce the cost or to reduce set up times, embracing elements of continuous improvement which were absent from conventional operations and management accounting practices. Kaplan continues in this manner to outline the novelty of the three innovations noted above, proposing that management accounting has “seen great change” (1994: 258), and speculating that there will likely be additions to the “new practice” (ibid).

In the years since publication, many other developments have taken place and it is in the spirit of Kaplan’s original application of the term that will be replicated throughout this thesis, namely as an umbrella term for the practical developments appearing in the literature post- *Relevance Lost*. However, before attention is given fully to the new, it would be worth elaborating what is meant by “old” and “traditional”, as well as tracing some of the tensions proposed by scholars between the two areas of practice.

2.2.1: Tensions of novelty

The techniques and management models that comprise traditional areas of management accounting practice and theory were heavily criticised, as noted above, and led to the establishment of several branches of study and new areas of practice, labelled by Kaplan (1994) as NMA. However, despite the expansion of MA into these areas, very few empirical studies exist that examines the theoretical characteristics of these techniques, despite claims in the normative literatures that the newer areas of practice are more relevant. For instance the lack of empirical research in how SMA operates in practice is widely noted (Lord, 1996; Roslender, 1996; Langfield-Smith, 2008), and similarly a lack of empirical work on the usage of contemporary and new forms of management accounting, for instance customer accounting is also sadly missing (Boyce, 2000; Guilding and McManus, 2002; Bourguignon, 2005; Cuganesen, 2008). Implementation and diffusion studies have focused on the spread of these new ideas through surveys of adoption rates (Bjørnenak and Olson, 1999) and case study examinations (see Ax and Bjørnenak, 2007), but the organisational context of accounting has not been investigated, despite acknowledgements by some (Kasurinen, 2002; Ax and Bjørnenak, 2007; Modell, 2007) that these innovative and new accounting practices have had some considerable impact upon practice. At different times researchers have issued calls for more empirical research on these new techniques (Lord, 1996; Roslender, 1996; Boyce, 2000; Ittner and Larcker, 2001; Langfield-Smith, 2008; Otley, 2008), but the calls are largely unanswered, and a paradox emerges: new ideas are expressed normatively in the managerial and professional literatures as being more suited to contemporary business environments, but, as a research community, we do not know much about them.

A certain tension is also created between the old and the new; for example Stewart (1997) and Edvisson (1997) each claim the existence of a knowledge economy, in which new techniques are needed to accurately record and manage both the creation of value, and the value of intellectual capital respectively, which also implies that traditional measures are not suited for this knowledge economy, creating a tension in the literature between contemporary and traditional, old and new, and indeed, theory and practice (for instance, see Scapens, 2006). Perhaps worst still are fears expressed that novelty and these new techniques are representative of more pervasive ways for managers to assert control over previously unrecorded variables and resources. With regards to developments in intellectual capital accounting, for instance, commentators (Gowthorpe, 2009; Roslender and Fincham, 2004) have discussed developments with regard to issues of managerial control, noting that technical pronouncements and advancements are made at a cost to employees, in that by making their endeavours knowable and measurable, it could lead to further oppressive calculative practices. Boyce (2002) and Bourguignon (2005) highlight developments in customer valuation models and discuss potentially damaging effects of their use on customer groups, as both feel that marginalisation of undesirable customer groups is a real outcome, and in some cases, alienation of poorer customer groups is also possible. In their review of developments of strategic management accounting, Cooper and Hopper (2007) condense a mixture of case studies and theoretical articles whose view of developments are largely sceptical and conclude that new techniques could be constitutive of a new Taylorism, creating new possible modes of behavioural standardisation that are more oppressive than traditional technologies.

Yet, in spite of some of these fears, coercions to the adoption or implementation of contemporary practices are made without the support of a substantial body of knowledge or research.

2.3: Elaborating Traditional Management Accounting

Traditional Management Accounting (TMA) encapsulates much of the spirit in what was eternal in the period of industrialisation of the UK; set against the competitive and productive changes brought about by the proliferation of increased manufacturing and large scale production, accounting measures were needed that not only accurately recorded cost information, but also allocated costs to products (Loft, 1995). Rationalism and marginalism, two concepts stemming from neoclassical economics, served as the bases for the method of apportionment under TMA (*Ibid.*) as well as providing the rationale for the approach adopted by Coase (1938) and Edwards (1938) who evaluated potential contributions to accounting on their "decision usefulness", a key tenet of which is economic rationalism. Mirroring wider social and political changes under both the introduction, and lasting impressions, of industrialisation, rationality, marginalism and scientism that were associated with the industrialised project of modernity seemed ubiquitous in publications on management accounting (*cf.* Montagna, 1997); for instance the writings by Coase and other researchers at the London School of Economics from the early 1900s through to the 1930s where economic theories of value permeated much of what was considered to be accounting practice. Research on the ties between LSE and accounting practice during this period is relatively capacious (see Whittington, 1994; Napier, 1996; Zeff, 1997), and the links between economics and management accounting in the UK continued with the publication of the Solomons' edited (1952) *Studies in Costing* whereby Solomons noted that some of the articles in the collection should be of interest to economics students, owing to the shared conceptual foundations of management accounting and NCE. Whilst the expansion of economic methodologies engulfed a positivist approach based upon scientific method, accounting also borrowed ideas form scientific or engineering perspectives.

Indeed, it was mainly in the US where scientific approaches to management and management accounting were becoming widespread, stemming perhaps from influences of Frederick Taylor's experiments on standardisation (Taylor, 1911) where it was hypothesised that a particular job should require a particular completion time and that these times could be normalised across a range of observations. This culminated in a standard time taken for the completion of a specific task or job. which eventually became part of the organisational catalogue through scientific management, and has been represented in accounting practices by standard costing and variance analysis (Miller and O'Leary, 1987), the idea of which is to construct an expected standard level of production costs through time and cost measurement 'experiments', and any cost deviations from, this standard can then be investigated and analysed. Whilst not explicitly entrenched in NCE, the approach of variance analysis becomes more akin to NCE in operation. To explain; production planning is based on estimates, and outcomes of production are compared against these estimated standards, and outcomes are not necessarily guaranteed to exactly correlate to expectations, consequently managers expect variance around results (Scapens, 1993). However, the issue under variance analysis is for managers to investigate whether any variance is a random fluctuation based on inaccurate estimates, and hence an acceptable variance, or whether variances are significant departures from estimated levels, and hence in need of clarification. Bierman *et al.* (1961) introduce a model for variance analysis based upon a decision theory approach, where any proposed cost of variance analysis is compared to the expected cost of not investigating the variance(s), and if the cost of not investigating exceeds that of investigating, decision theory postulates that managers should not conduct variance analysis. Scapens simplifies this position as an approach where "the costs and benefits of investigation can be set out in a pay-off matrix" (1993: 82). Inherent to this position of a cost-benefit matrix, are principles of marginalism, where actions are judged against economic criteria in terms of a marginal or incremental benefit, or a marginal cost of managerial intervention or investigation. Thus in a practical implementation of variance analysis, whilst the theoretical underpinnings are extended to work in scientific management and statistical decision theory, there is no "fundamental change" (Scapens, 1993: 91) to the underlying framework of NCE that has peppered the development of TMA.

To be sure, much of the developments of the time have become codified in textbooks, even now, as being representative of a sense of what is traditional in management accounting practice. Standard costing, variance analysis, marginal costing, CVP and break-even analysis, for example, are all portrayed in some ways as being "traditional" or as foundational to the practice of management accounting (See, Drury, 2000: 46-60; McLaney and Atrill, 2010). Critiques of traditional costing practices (Johnson and Kaplan, 1987; Shank and Govindarajan, 1989) also congeal around notions of a traditional set of practices comprised of economically influenced cost management and cost accounting techniques. Indeed, whilst other critiques are not fully elaborated here for reasons of expediency, a common theme does emerge in presenting the old and the traditional as somehow weak and no longer relevant for contemporary business environments. This theme is also dominant in Kaplan's scholarship. For Kaplan (1984; with Johnson, 1987) TMA is rooted in economic conceptions of cost and was concerned with economic problems. For instance, he links the development of avoidable and sunk costs with the need for accountants to use cost information for decision making on pricing and operating efficiency. Such concerns for Kaplan (and Johnson, 1987) are to be associated with the needs of organisations and accountants in the business environment of the 19th century, reflecting absorption of economic theories into accounting. Similarly others have noted the influence of economics on the development of management accounting (Kelly and Pratt, 1992), and in particular the development of TMA (Scapens, 1993), which owes much to the groundwork of neoclassical theories (Kelly and Pratt, 1992; Puxty, 1993). A space is delineated in the following section to discuss what is meant by the term Neo-classical economics, and more explicit elaboration of its influence upon management accounting is provided.

2.3.1: The Influence of Neo-Classical Economics

Neo-classical economics (NCE) is a term that collectively refers to developments in economic thought which opposes the classical economic position on supply and demand. The first theoretical instances of NCE appeared at the turn of the 1900s, through the work of economists such as Marshall, Jevons and Walras. Dissatisfied with the classical and Marxist theories of value, and classical opinions on market price composition, some economists began to shift the focus of economic analysis towards explicit considerations of the role which supply and demand have in constituting a market price (Marshall, 1890/1920; Barber, 1967). Neo-classical revisionists altered analysis from the classical focus on value and production towards utility and demand, stemming from the concept of economic rationality, which is a fundamental concept of NCE. In particular, Marshall (1890/1920) focused upon the issue of customer satisfaction, postulating that 'demand' is a reference to the relationship between quantity of goods demanded and price; in some situations, under Marshall's analysis, some buyers would be prepared to purchase more goods at lower prices than they would if goods were offered at higher prices, consequently, Marshall formulated a graphical relationship between demand and price, which forms the basis for contemporary economic analysis: the demand curve. In NCE, this relationship between demand and price is of crucial importance, as a central problem in NCE is the determination of market prices.

Within the theory of economic rationality proposed by NCE, and in particular Marshall, each individual is seen to act out of self-interest and aims to maximise their happiness with each economic allocation or transaction. In economic writings, this transactional happiness is referred to as utility and for consumer preferences in the market place utility is taken as the central governing notion in all transactions. For Marshall, consumers only entered into transactions in order to acquire utility from purchases, but the amount of utility achieved from goods or services was related to the number of units acquired. With each incremental purchase, the consumer’s aggregate utility would decline, such that any rational consumer would be prepared to pay less for additional units, and producers would have to offer any incremental units at a reduced price for the consumer’s utility to increase with additional units. Marshall referred to this as diminishing marginal utility, and this introduces the concept of marginalism into NCE analysis (Barber, 1967).

Whilst economic rationality and marginalism is at the heart of NCE, there are several other assumptions and characteristics which are often linked to NCE. These assumptions overall can be identified as: rational decision-making; utility maximisation as an incentive to action; analysis which is based on stationary circumstances; a partial supply and demand equilibrium; analysis which has a limited focus; that information is complete and perfect and is available freely; there is minimum government intervention that benefits society as a whole; and finally that there is free competition (Marshall, 1890/1920; Barber, 1967; Deane, 1978; Pirie, 1982; Sheffrin, 1983; Scapens and Arnold, 1986; Scapens, 1993; Shotter, 2001; Ryan *et al.*, 2002).

It would not be prudent to discuss each of these, given time constraints and word limits of this thesis, so a brief overview of each concept and underlying assumption is provided below.

The first assumption of NCE is that consumers are believed to be rational decision-makers, where, as above, consumers are expected to purchase goods based on their expected impact upon their utility. This stems from the concept of self-interest and economic participants are expected to act based on their own motivations and interests in order to achieve maximum satisfaction[1] (Barber, 1967; Sheffrin, 1983). In an organisational context, managers are thus assumed to be rational decision makers, and are motivated to action through material impacts upon utility, which is taken to mean profit; in short, managers and decision makers are assumed to be profit maximisers (Kelly and Pratt, 1992; Reiter, 1994), thus utility decisions are made based on the best course of action which will maximise returns.

Another underlying assumption of NCE is that utility analysis can only be grounded in a limited set of circumstances, usually occurring at a specific moment in time, as consumer preferences and tastes can change, which impacts upon the price of exchange that consumers are willing to pay (Marshall, 1890/1920; Barber, 1967). This means that information relating to different periods, such as inflation or changes in price expectations, is ignored by NCE and generally treated as externalities. Indeed Reiter (1994) writes at some length on the negative consequences of treating social issues as externalities, arguing that decision making models attempt to deflect uncertain variables as externalities, basing situations in a static environment that is highly decontextualised. Linked to this position of static circumstances, NCE analysis is also conducted by examining a limited number or set of variables. Consistent with the concept of ceteris paribus, only the variables under evaluation are changeable and all others remain constant and equal. In management accounting, this might extend to an apolitical and ahistorical analysis (Tinker *et al.*, 1982), and a consideration of a relatively stable external environment.

Analysis within NCE assumes that in the long run, the market tends toward equilibrium (Schumpeter, 1934) where an optimal price is determined when supply meets demand.

Finally, NCE presupposes the accessibility of perfect and complete information which is also freely available (Barber, 1967; Shotter, 2001). Under some forms of NCE

[1] I am aware that the concept of 'economic man' and the extent to which economic agents act out of self-interest is hotly debated. Indeed, the work of Herbert Simon and John Muth are examples of polar disagreements to the concept of economic rationality that is postulated by NCE. For Simon (1979), rationality could never fully be measured owing to a lack of information and general uncertainty regarding situations, and as a consequence, he proposed the notion of bounded rationality, where economic agents sought not optimised or maximum satisfaction, but rather a predetermined and acceptable level of satisfaction. However Muth (1961), perhaps controversially took the opposite position from Simon, in that Muth felt that NCE models did not fully explain rationality and as such NCE did not "have enough" rationality (see Sheffrin, 1983:6-17 for an overview of this argument). So whilst rationality and utility is debated in economic literatures, the position of this thesis is to elaborate the portrayal of both under an NCE framework, as it is this particular conception of rationality and utility that has been acknowledged as impacting upon the development of management accounting, and accounting theory in general (Tinker, 1985; Scapens, 1993; Shotter, 2001)

analysis, for example, no adjustments are made for risk and future uncertainty is ignored in equilibrium analysis. This provides only static and deterministic solutions from models with clearly defined variables that present situations in a reductionist manner, such that complex situations (as noted above) are often excluded from the analysis in favour of variables that correspond to readily observable phenomena.

Each of the assumptions and characteristics has not impacted upon the development of MA in the same way, and the focus of assumptions change somewhat when applied from economic analysis to the construction of accounting techniques. To elaborate, in MA generally, the focus changes from consumers to firms and decision-makers are no longer considered rational consumers, but rational managers. In the first instance, the assumption of self-interest extends itself to MA through the auspices of profit maximisation as an incentive to action instead of utility maximisation being the crucial factor. In this case, profit maximisation is the main aim of the firm. Much in the same way that an individual proposes to not undertake actions in which costs outweigh any gains (Robinson, 1933) a firm is considered to not enter into an economic transaction where the gains are less than costs involved.

The influence of rationality and firms as profit-maximisers impacted upon the development of several techniques developed from the 1930s to the 1960s. Owing to the importance on information in a decision-making context, such techniques utilised insights from NCE as a basis. For instance, relevant costing was advanced as a tool to enhance short-term decision making, where the focus of any analysis was on choosing only costs and revenues that are relevant to a particular scenario, for example the proposed undertaking of a special customer order, or the closure of a manufacturing site. Under relevant costing, any costs or revenues not linked to a business decision are ignored as irrelevant. Relevant costing also builds upon the notion of opportunity costs from NCE, in that when making a choice between two alternatives, there is always a foregone alternative, and relevant costing analysis aims to highlight any potential benefits to be gained or costs incurred as the result of choosing one alternative over the other. Furthermore, the idea of incremental or marginal costs are also important to relevant costing, in that costs only become relevant to a particular decision if they have an incremental effect upon the list of estimate costs. For example, if the scenario dictated that direct material costs for a specific manufacturing period amounted to £1m, but that a customer order required an additional £50,000, and then acceptance of the customer order would increase overall company costs by £50,000, such that the relevant cost of materials in the scenario becomes £50,000. However, if the company has 50% of material in stock for the customer order, then incrementally, the company need to order in the remainder of the material priced at £25,000 (i.e. 50% of the market value of required material £50,000). In this situation, the company cost of materials for the customer order is still £50,000 as this material is needed in order to complete the order, but the relevant cost becomes £25,000 as this represents the incremental cost of accepting the customer order, in that 50% of the materials needed are in stock, but an additional 50% is required, priced at £25,000. In the decision making or planning context of relevant costing, these incremental costs are totalled and compared to an acceptable price which the company can charge for the customer order, and if relevant costs are less than the acceptable price, the company should accept the offer of business from the customer. This can highlight how scarce resources can be used by a firm and more importantly whether one particular scenario or choice provides a better usage of resources than an alternative scenario. As a result, relevant costing is advanced as an effective means of short term decision-making, as users of accounting information can easily analyse the flows and benefits of particular scenarios, allowing the employment of resources in an effective or efficient manner. A key underlying assumption here is that the decision maker intends to maximise short term returns, as incremental costs and benefits of a decision scenario are weighed up against acceptable prices or profit margins, and because of this marginalism, decisions consider short term gains achieved as the result of smoothing out incremental costs associated with a particular decision or scenario.

Consequently marginal analysis and agents as utility or profit maximisers are central themes in relevant costing. Additionally, the decision maker is assumed to have available, at no cost, perfect information that contains no uncertainty, which would structure the decision in order to achieve a profit maximising solution (Scapens, 1993).

Similarly, break-even analysis has underpinnings in neo-classical theory. Marshall's analytic emphasis on supply and demand curves and marginalism is reflected in the model of break-even analysis, through the use of marginal costing to identify profits, and costs, in relation to sales volume or total sales revenue.

NCE also impacts upon costing analysis as Marshall's (1890/1920) division of costs into prime and supplementary costs, extended into the lexicon of TMA vocabulary as fixed and variable (marginal) costs. The logic of such an analytical separation in a production or manufacturing plant impacted upon the development of cost management[2], in that a fixed cost is incurred and does not change, whilst a variable or marginal cost is affected by operations and can be controlled or managed. The split between short and long run analysis also simplified or clarified the use of accounting information, specifically costing analysis and forecasting, for decision making purposes, as exemplified in the case of break-even analysis and relevant costing above. Marshall's work on economies of scale also impacted upon TMA by providing insights into scales of production, which elucidates potential for cost management as economies of scale imply that the larger a production, the higher the costs. This seems obvious, yet at the time, this was a new idea in NCE.

Thus, on the whole neoclassical views of the firm and of agency and human behaviour are adopted (Scapens and Arnold, 1986; Scapens, 1993; Ryan *et al.*, 2002) on a widespread basis in TMA; rational behaviour of managers and consumers is also assumed (Ribeiro and Scapens, 2006). Furthermore, TMA is normative and proposed a mechanistic view of the organisation (Puxty, 1993; Riberio and Scapens, 2006), where no concession is made to contextuality of practices, such that similar organisational configurations and processes are assumed, supporting the assumption of stationary and unchanging circumstances. Yet further still, TMA is limited to decision making situations as grounded in the assumptions of NCE, including the need for clearly established scenarios (Ribeiro and Scapens, 2006) as well as defined variables and assumptions (Scapens, 1993). These limitations deepen the influence of NCE on TMA as they call attention to the postulation of reductionism in decision making models and planning and control theories of TMA, in addition to the abstraction, or viewed more cynically the removal, of contextuality as scenarios ignore historical, cultural and social contexts of analysis. It should be noted here, that I do not suggest that decision making

[2] I readily acknowledge that this is a contentious point, because inherent in my assumption here is a primacy to neo-classical historians who claim that accounting change is driven by organisational needs, and that the expansion of production necessitated more sophisticated models of accounting and management accounting (see, for example, Loft, 1995). However another set of historians, for instance Marxist writers might claim that this exact same accounting change was born not out of organisational necessity to accurately measure production, but that it was driven by shifts in the antagonisms between labour and capital (for example, Hopper and Armstrong, 1991); furthermore, Foucaultian writers might link these changes to shifts in the social context in which organisations operate (for instance, see Miller and O'Leary, 1987, for an excellent and seminal overview). Fleishman and Radcliffe (2005) have documented each of these (and more) perspectives on accounting history, and note, as I do here, that each perspective contextualise accounting according to their underpinnings. So whilst I am examining the influence of NCE upon management accounting in a primarily theoretical fashion, I am also aware that the position is contended, and different a priori frameworks would attribute the same developments to different phenomena according to which a priori framework they are referring to.

or analysis in practice aims to maximise profit, or that managers are motivated solely by how their utility is to be increased. Rather, it is the assumptions of NCE which specify these conditions in the theoretical characteristics of TMA.

2.3.2: Strategic Management Accounting: An Example of the New?

Strategic Management Accounting (SMA) was heralded some 20 years ago as a series of techniques and models that aimed to provide accounting information to managers that is of strategic value. Originally SMA was viewed as a rebuttal to the arguments of Johnson and Kaplan (1987) concerning the lost relevance of then contemporary and traditional management accounting techniques and systems. Initially developed by Simmonds (1981) SMA explicitly had an external outlook compared to the limited internal focus, much bemoaned of TMA, and it was developed as a deliberate attempt to align strategic positioning of the organisation to the accounting function. However, over time, Simmonds' conception of SMA has since been recognised in the form of Strategic Cost Management (SCM) (Roslender and Wilson, 2008) and now represents one of a number of techniques that compose SMA.

Originally, numerous practices were included under the collective term of SMA, including and not limited to approaches of cost management, advanced manufacturing technology, and attribute costing. Since these initial writings, the area has developed and since branched out to include many more techniques, such as target costing, and approaches of competitor focused accounting (Guilding, 1999), such as competitor cost analysis (Jones, 1988). Under this expansion of theory and practice, there have been some attempts to further distinguish between initial techniques and more contemporary offerings (See Guilding and McManus, 2002, for a comprehensive cataloguing of SMA).

However, despite these advancements in this area over the past 2 decades, there is *still* no clear consensus on what constitutes SMA (Langfield-Smith, 2008). For example SMA has been identified as a generic approach to accounting for strategic positioning (Roslender, 1995, Roslender and Hart, 2003), as well as a supply of information that supports longer term strategic decision making in organisations (Innes, 1998), and as a tool for gathering and analysing information about a company's customers and competitors (Simmonds, 1982; Bromwich, 1990, Guilding and McManus, 2002), whilst the role of SMA can be deeper, in that SMA actually determines strategy mixes that support organisational objectives (Dixon, 1998). Accepting these definitions, SMA utilises existing accounting information for internal purposes that supports the overall competitive strategy of the organisation. Furthermore, in the role of SMA in customer and competitor analysis, it becomes more externally focused and operates in a monitoring role to assess the effectiveness of existing strategies and strategic decisions when compared to competitors.

Despite the lack of an established agenda as to what comprises SMA, there have been several attempts to clarify the underpinnings and present typologies (Roslender, 1995; Wilson, 1995; Lord, 1996; Carr and Tomkins, 1996; Brouthers and Roozen, 1999).

Roslender (1995), for example, had narrowed the perspective to consider developments in management accounting where information was designed to assist in the creation and maintenance of competitive advantage, through accounting for strategic positioning (ASP). Identified under ASP are three generic approaches: activity accounting, strategic management accounting and accounting for advanced manufacturing technology. Under activity accounting, strategy intersects with cost information, whilst strategic management accounting is proposed as an approach where cost information has a wider role beyond the traditional conceptions of asserting monetary values to production and operational costs. Particularly that it could, through target costing initiatives, integrate insights from marketing in order to provide a deeper conception of strategy and enable accounting information to be used alongside deeper notions of strategy.

The classification of SMA by Wilson (1995) focused on providing several typologies of the various characteristics and approaches of SMA. Again he notes the importance of SMA in its capacity to develop competitive advantages. On a technical level, Wilson compares the theoretical focus of SMA to conventional techniques, which is outlined in table 2.1.

From a purely technical perspective, SMA attempts to overcome the perceived shortcomings of TMA through a more expansive outlook and external (or market-drive) orientation, and introduced these themes into the SMA literature.

Conventional Characteristics	Strategic Characteristics
Historical	Prospective
Single entity	Relative
Single period	Multiple
Single decision	Sequences, patterns
Introspective	Outward looking
Manufacturing focus	Competitive focus
Existing activities	Possibilities
Reactive	Proactive
Programmed	Unprogrammed
Overlooks linkages	Embraces linkages
Data orientation	Information orientation
Based on existing systems	Unconstrained by existing systems
Built on conventions	Ignores conventions

Table 2.1 TMA characteristics versus SMA (Source: Wilson, 1995: 163)

Lord (1996) is widely cited as providing the groundwork of a framework of SMA, and she builds upon the notions of an expansive and externally focused MA. Upon the evaluation of the extant SMA literature, she concluded that there are three fundamental aspects to SMA. Firstly, SMA extends the internal focus of TMA to include external information about competitors, opening up to include external information about customers and consumers. Secondly, SMA considers the relationship between the strategic position of a company and the resulting emphasis on management accounting systems and information. Finally, Lord deemed SMA to clarify ways in which competitive advantage might be gained, however, on the lack of a coalesced conceptual base for SMA, she questioned its actual existence in a practical context, by stating that SMA is “but a figment of the academic mind” (1996: 18).

By 1999 there was an emergence of some empirical attempts to draw attention to SMA in a practical context, followed by the publication of further classification of the underlying elements of SMA. Brouthers and Roozen (1999) suggested that SMA can be used to plan, implement and control the strategic management process by conducting environmental analysis; to elaborate, they claim that a firm’s performance can be optimised when management align the firm's strategies and capabilities with the state of turbulence in the business environment. They develop a five-level representation of potential business environments and identify at each level the type of information that may be required. For example at level 1, deemed the 'repetitive environment', they anticipate that there are minimal requirements for SMA; whereas at level 5, the 'surpriseful environment', there is a great need for SMA. Their theory, then, acts as a continuum showing the possible need for SMA information within determined business operating environments and conditions, such that in a predictive environment, there is no real need for SMA, the further toward a continually changing environment a company progresses, however, the greater the demands on SMA information. Implicated in this conception of SMA is a hard external focus, as well as a managerialist perspective on the use of SMA information through the planning, implementation and controlling of processes. Also contained within SMA is also a greater emphasis on qualitative information, as well as the traditional quantitative factors. This is a fundamental shift away from the hard numerical focus of TMA.

Dixon (1998) also suggested that the processes of SMA enable certain responsiveness to changes in the business environment, implying that underlying the processes of SMA is a type of dynamic fluidity that stems from the use of strategic accounting information in monitoring the external environment. Again this contrasts to traditional ideas which are internally focused.

But by recent debates, strands of literature do not approach confluence, and no commonly agreed framework for SMA exists, despite a general agreement on common elements. Through an amalgamation of these perspectives it emerges that there are four main underlying concepts and themes that SMA is dependent upon; these being: Porter's Value Chain; Strategic Positioning; Competitive Advantage; and Multi-period Analysis.

A detailed overview of the value chain is provided in the following chapter. Strategic position analysis is central to notions of SMA. Whilst strategic positioning might broadly refer to how the organisation performs relative to its industry or environment, in a management accounting context it refers to how cost information can be effectively managed (Shank and Govindarajan, 1989). Research has also demonstrated that organisational performance can be enhanced through the closer linking of the management accounting function and the overall strategic orientation of the organisation (Kober *et al.*, 2003), and that a change in the overall strategy effects changes in the management accounting system (Langfield-Smith, 1997), thus there is a greater dependence upon management accounting information in relation to the strategic positioning of the organisation under models and modes of SMA.

Additionally SMA might also represent further attempts at broadening the internal focus of TMA by focusing explicitly on the external conditions in which a firm operates and management accounting information is used to support this monitoring. In some forms of SMA this takes the form of competitor cost analysis, where cost information is compared to competitors', or it might consider customer information (Bromwich and Bhimani 1994). Innately integrated in these assumptions are the use of cost information and strategy, and so some concession must be made to the role of strategy in its interaction with cost information in this relationship. Shank and Govindarajan (1989) defines SCM along the two generic strategies suggested by Porter (1985), those of cost leadership and differentiation.

Briefly, cost leadership refers to an organisation directing their efforts to ensuring that the organisation is the lowest cost producer in the industry. By maintaining existing market price levels and reducing costs below competitors the organisation is able to achieve above average profitability on the good. Whilst differentiation is commensurate to the provision of products that are perceived to be sufficiently different to those offered by competitors, and owing to such a distinction, the organisation can command a premium price for the differentiated good. Since publication of these generic strategies, it has been remarked that cost leadership can be used in conjunction with a price leadership strategy, where the combination of costing and pricing is deemed to achieve benefits in economies of scale. There have also been some suggestions that differentiation entails aspects of branding (Roslender and Wilson, 2008); attributed to the customer in this interpretation of differentiation is a primacy to their needs, as the strategy is based on an approach where the customers of an organisation value the product highly which renders it adequately superior to competitors and enables the organisation to charge a higher price than competitors. It is with respect to this observation that aspects of branding strategies are also important to organisation's acting as a differentiator. Emerging from these generic strategies that underpin some versions of SMA is the interplay between accounting information and strategy in the market.

Returning to the example of competitor focused accounting, a cost leadership strategy conceptualises customers along the lines of economic rationalism where they seek, for want of better terminology, 'the best deal', or alternatively customers seek value for money. Following a cost leadership strategy would then entail the organisation collecting cost and price information from their competitors and then comparing it to internal levels. Since profit is determined by price and cost levels, more profit can be gained by lowering cost or alternatively by increasing price, and as such a cost leadership strategy advocates offering the same good that is available from competitors at a lower price, and the use of competitor focused accounting becomes prominent here, as monitoring price levels determines the extent of strategic implementation: if competitor price levels are low, then strategic actions are difficult to fully implement, as it could result in customer switching between an organisation and its competitors. Thus to maintain profit levels, the organisation would be inclined to lower costs in order to offer goods at lower prices, and cost management is vital to this process.

Whilst initial forays into strategic forms of management accounting were based upon Simmonds' and Porter's work respectively, disagreements in the literature over the suitability of these strategies arose (Roslender, 1995; Lord, 1996) and SMA has increasingly been merged with other strategic combinations in order to develop a set of management accounting practices that link up effectively to the organisation's overall strategy. For instance, (Simons, 1990) discuss strategic potentialities when marrying Miles and Snow's (1978) writings on prospector/defender strategies with Porter's generic strategies of cost leadership and differentiation. For Miles and Snow (1978) cost information is embroiled in the strategic process as defenders require control systems to be focused on cost objectives implying a heavy reliance upon budgeting and monitoring of performance against said cost objectives. Here, financial performance is linked to budget goals and is used to judge strategic outcomes.

ABC explicitly introduced to modern management accounting the idea of cost driver analysis which, arguably, builds upon Porter's discussions of cost drivers and has since impacted upon the development of several new areas of practice; Shank and Govindarajan (1989) notes the centrality of cost drivers to strategic cost analysis, and the notion of uncovering which activities drive costs is a forefront consideration of customer profitability analysis (Foster and Gupta, 1994; Guilding and McManus, 2002; Weir, 2008). Using cost driver analysis then is one of several ways in which management accounting might support strategic orientation of the organisation. Another approach, although not discussed here, might also be attribute costing (Bromwich and Bhimani, 1994; Roslender, 1995). Of vital significance to these approaches, and to the development of SMA theory, is that cost information is used to assess the strategic positioning of the organisation: cost drivers, to give a brief example, can be mapped through analysis of the industry benchmark for raw material costs whereby the organisation might determine the industry average and adjust costing strategies accordingly.

SMA is condoned by proponents as being central to securing a competitive advantage, be it through the unleashing of cost information as a strategic weapon (Freeman, 1998), or through enmeshing cost information and even through effective planning mechanisms (Collier and Gregory, 1995). What transpires from this broad research on SMA is the importance given to the search for competitive advantage, which has been identified by some as one of the most important distinguishing features of SMA (see Brouthers and Roozen, 1999). Inherent in each combination of strategic accounting, the securitisation of an advantage over competitors is a major concern. More specific instances of organisations' attempts to secure a competitive advantage emerge as a prevalent theme in SMA, especially in recent years; taking a seminal example Roslender and Hart (2002; 2003) attempt to devolve practical situations of SMA located notions of SMA where advantages were gained through the interfunctional cooperation between marketing and accounting departments. This cooperation is indicative of noted characteristics of SMA in that it exploits linkages within the organisation (Wilson, 1995) and targets the entire value chain (Shields and Young, 1992) in order to secure sources of competitive advantage.

Finally, as remarked by some commentators (Shields and Young, 1992; Wilson, 1995; Brouthers and Roozen, 1999), SMA has a broader scope in application in that the time frame under evaluation often extends beyond the current period of operation, exhibiting traits of multi-period analysis, which is not presented in conceptions of TMA. This broader focus and larger time frame allows organisations to breakdown the strategic decision making process to generate and consider potential alternative actions (Wilson, 1995), whilst TMA is narrowly focused upon actionable outcomes in the current period, subsequently neglecting any alternative future period actions with regard to decision making.

Whilst the NMA that Kaplan defined in 1994 corresponds to much of what is discussed above as SMA, the Newness in management accounting that is presented in academic literature and reportedly found in practice and case study research is far more varied than Kaplan recognised, partially owing to advances in practice and theory in the period following publication.

Another contemporary area of focus that escaped the attentions of Kaplan (1994) includes writings on value creation, typified by models that are oriented towards the future creation of value for the company. So what is "new" will always be in a constant state of flux, as innovations become either enduring features of organisational practice, hence being codified into textbooks and academic literature as the current 'state of the art' - in much the same way that techniques in the 1960s were recognised as exemplifying examples of current practice (Scapens, 1984) - or alternatively that innovations fail to make any measureable or considered impact upon both the academic and practical landscapes. In spite of this, however, the role of traditional practices is still maligned, presenting a sort of tension between new and old, or contemporary and traditional.

2.4: Why study the 'new'?

As discussed above, there is a gap of sorts between what is stressed in technical advancements of novelty, and what is known about novelty in contextual settings. It is this paucity of empirical research examining the 'new' management accounting that this thesis intends to address. Consequently, the following chapters of this thesis aim to focus on what distinguishes contemporary techniques from traditional practices. Žižek claims:

"The only way to grasp the true novelty of the New is to analyse the world through the lenses of what was 'eternal' in the Old" (2009: 6)

And it is in this sense that an examination of the old and the new, or to be more precise the traditional and contemporary, will proceed. Scapens (1993) and Puxty (1993) both documented that more traditional techniques are clearly developed through the patronage of NCE, but hinted that emerging practices and theories of management accounting were beginning to abandon such underpinnings. An IFAC (1998) statement on the evolution of management accounting practices also notes a divergence away from ideas of NCE towards a more explicit strategic orientation which is more concerned with the production and creation of value. Interestingly, amongst the recommendations made by Johnson and Kaplan (1987) on how to increase contemporary relevance of management accounting was a focus on providing more detailed situations in the classrooms and lecture theatres for managers, so that complex management situations would not be simplified, as they were perceived to be in regards to the decline of management accounting. Intrinsically, this represents a move away from the influence of NCE, as providing more complex scenarios for study purposes can be seen as a move away from the neoclassical assumptions that are explained in more detail above. The remainder of this thesis will examine the theoretical characteristics of one particular branch of the NMA: value creating management accounting (VCMA). The underlying theories that inform or have contributed to the development of VCMA will be delineated and then presented for examination alongside the espoused influential underpinnings of NCE. By doing this, it is hoped that an elaboration of the theories which inform contemporary practices will enrich the existing body of knowledge upon contemporary practices, as well as going some way to addressing the perceived scarcity of research on contemporary practices.

Before progressing onto a consideration of the theoretical characteristics of NMA, however, it would be prudent to provide some discussion as to why a study of the new or contemporary in management accounting is merited. Firstly, as noted above, there is a scarcity of empirical research which evaluates contemporary modes of practice in organisations; it is hoped that this thesis will contribute to this existing body of knowledge by locating contemporary practices in organisations and examining the effects of the related accounting change upon the organisation. This corresponds broadly to the research sub-questions of this thesis.

Secondly, researchers and academics have been urged to conduct practically-oriented research in order to identify any enduring concerns of management accounting practice (Johnson and Kaplan, 1987; Roslender, 1996; Otley, 2008), and, more specifically, to recognise how practices develop in practice. MA innovations are in a continual process of transition in organisations (Ax and Bjørnenak, 2005; 2007), which points to differing rationales for implementation and adoption, and also implies that the resulting technique that is used in an organisation is different to that presented in the literature. Indeed, Ax and Bjørnenak (2005) highlighted this point through their focus on the balanced scorecard (BSC) by documenting how the BSC is used differently across organisations and concluded that innovations are in a constant state of translation. If this is the case, the techniques presented in the literature may be very different to those located in organisations. Thus, there arises a prospect to evaluate how and why such a translation process occurs, and to contribute in this sense to the existing voluminous research of accounting in practice.

Returning to the issues of enduring concerns, previous studies on accounting practices have highlighted a number of continuing issues between techniques (Otley, 2008), such as the maintenance of tensions between capital and labour (Cooper and Hopper, 2007). If new practices continue along the same lines and produce the same effects in practice, then are they any ‘better’ than traditional techniques?

A final issue, then, relates to fears which have been expressed by critical accounting scholars that new forms of accounting produce undesirable effects (Cooper and Hopper, 2007). Coupled with the replication of existing issues and effects highlighted above, it becomes pertinent to examine the concerns attached to contemporary practice, particularly to a branch whose remit is “the effective use of resources, through the use of technologies which examine the drivers of customer value, shareholder value, and organisational innovation” (IFAC, 1998: para. 7). Linked to these existing and new effects of VCMA adoption, there may be some wider implications for the development and design of practices.

Specific technical characteristics of VCMA are addressed in the next chapter and are then compared to the underlying neo-classical influences of TMA to assess the level of similarity and difference between the two sets of practices.

Chapter 3: Value Creating Management Accounting

3.1: Introduction

Whilst the theoretical influences of traditional techniques are limited primarily to the concepts derived under neo-classical economics, contemporary techniques are said to transcend this influence (Puxty, 1993; Scapens, 1993) with theories and concepts influencing their development originating from varied disciplines as organisational behaviour, psychology, management science and operational research, marketing and consumer behaviour studies. However, as raised in the previous chapters, there are concerns that the theoretical characteristics of both modern and traditional techniques are similar; that contemporary praxis is not substantially different to TMA. It is the overriding aim of this chapter to examine the key theoretical underpinnings of a particular branch of NMA, that of value creating management accounting (VCMA) in order to assess such claims that newer techniques are no different to more traditional areas of practice. In particular, the theoretical framework of NCE is used here to determine whether the theoretical characteristics of VMCA are comparable to those that underlie TMA.

3.1.2: The Rise and Contexts of Value Creation

The Institute of Chartered Accountants in England and Wales (ICEAW) launched the 2020 Vision Project, culminating in the publication of *Human Capital and Corporate Reputation: Setting the Boardroom Agenda*, which readily acknowledges the growing importance of intellectual capital, human resources and human capital, as well as issues relating to the measurement of these intangible resources. At the launch of the book in June 2000, then President of the ICEAW and Chairman of the 2020 Vision Project urged accountants and boardrooms to develop metrics for the measurement and management of these resources, as companies that did not do so, would "go the way of the dinosaurs". At length, Ward:

"Measuring intangibles like human capital may seem like a break with my profession's traditions but it's essential to building Britain's sustainable economic success. People are now the key drivers of profitability. However, this reality and its implications for the way we do business are poorly appreciated by British companies and accountants.

The key is to promote informed discussion amongst investors and to create new measurements that confirm value"

Hence in the UK, there was a very clear agenda of promoting the use, measurement and management of intangible resources, such as human capital, on the grounds that they created value for both the organisation and the economy. Mirroring these developments, The Financial Management and Management Accounting Committee of the International Federation of Accountants (IFAC) also stressed such importance in their *Revised International Management Accounting Practise* statement published in 1998 where they claimed that related accounting practices of measuring 'value' represented the fourth in the continuing stages of MA evolution and development, where the first stage of practical development occurred in the 1950s and was characterised by a shift from cost determination toward financial control through budgeting and costing techniques. By 1965 the field moved into the second stage of development to the provision of information for management control as captured through the impetus of decision analysis and responsibility accounting. Another shift was recorded in 1985 where wastage became important and practices, such as process analysis, were developed to focus on the reduction of waste. The fourth stage, which is important for the purposes of this thesis, was evident in 1995 where accounting practices were geared toward the generation or creation of value through the effective uses of resources - this was said to be achieved through the examination of drivers in customer and shareholder value.

This overview of developments in management accounting is also punctuated by changing notions on the role of management accounting, as IFAC propose that at stage 1, management accounting is seen as a largely technical pursuit which is necessary to achieve organisational objectives, but the role shifted to accounting as a management activity at stage 2; more specifically this management role involved the input and management of employees in order to support the management of organisational activities. This role of management was further emphasised under stages 3 and 4 where accounting information is central to management activities, in that during the most recent development of practice. These stages of development are also inherent in professional publications. To be sure, this role of management accounting adding value to the organisation has also been digested by the Chartered Institute of Management Accountants (CIMA) who have included a more recent focus upon the use of management accounting information in formulating strategies and optimising intangible resource usage (CIMA, 2010).

In November 2004, Graham Ward moved into the role as president of IFAC UK and in November 2006, stressed the importance of value creation in a speech delivered to the World Congress of Accountants:

“When I think of professional accountants in business, I think of value creation.

Let me refer you to a vision statement that a major pharmaceutical company developed for its finance function. This read: *To create competitive advantage by supplying management with forward-looking, timely, high-quality and value-adding financial and controlling support, we will strive and prove to be an invaluable partner in shaping the strategy and persistently challenging operational excellence*

To me, this conveys the role of finance in value creation in organizations. Yet it is a challenge to translate this vision, so that the finance function and professional accountants in business transform their modus operandi.”[3] (Italics in original)

For Ward, accounting and accountants have a central role in creating value through the usage and creation of management information in support of strategic decision making. As before in 2000, accountants are urged to recognise their potential role in developing such information. David Hastings, of Shell Canada Limited, and Mary Keegan of the HM Treasury department in the UK, reiterated Ward’s claims at the same plenary session; Hastings stressed the importance of accountants in understanding all elements of the business in utilising both financial and non-financial information to creating value, whilst Keegan drew parallels with public sector notions of value for money in that accountants are central to the strategy of recognising VFM and subsequently delivering value for the government.

Thus, the professional stance echoed from Ward, CIMA and IFAC is to redraw the boundaries of what management accounting is, and what it can be, to broaden its scope to embrace approaches to value creation. This emphasis has also been present in recent undergraduate textbooks (see Drury, 2008) such that value creation seems indelibly impressed into the landscape of contemporary management accounting.

[3] Speech available online at the following link: http://press.ifac.org/speech/2006/11/value-creation-through-professional-accountants-in-business

However, in order to create value through the effective use of resources, such as the utilisation of intangible assets and intellectual capital resources stressed by Blair and Ward, presents a challenge to accounting and accountants (IFAC, 1998; Roslender and Fincham, 2004) and it is from this position where notions of value creating management accounting (VCMA) stem from, the conceptual foundations of which are discussed in the remainder of this chapter.

3.2.1: Links between value creation and management accounting

The techniques and branch of management accounting practice identified by IFAC (1998) are those which have the capacity to create value for the organisation, and they are acknowledged as stemming from underlying theories of value based management (VBM), and some techniques represent a practical application of the theory of VBM (Malmi and Ikäheimo, 2003). Principally, the main methods of VBM in management accounting and financial management literatures include models of free cash flow and measuring total shareholder returns, whilst others include measures of economic profit, and some give dedication to intangible assets and resources. Indeed a post-millennial focus of accounting research, in general, has been on delineating drivers of shareholder value (Bourguignon, 2005; Ittner and Larcker, 2001), and of linking accounting to the creation of value through the identification, measurement and management of these value drivers (Bryant *et al.*, 2004). It is this feature and use of management accounting information that distinguishes VCMA from other techniques (see IFAC, 1998) in that management accounting is implicated in the process of value creation. A number of these ideas stem from Porter's (1985) discussion of the value chain.

As demonstrated in the previous chapter, from the mid-1980s through to the turn of the millennium, there was a widespread proliferation of management accounting techniques that sought to provide information relative to the organisation's strategic position. A number of these techniques were supported by a boon in research, whilst some did not have the anticipated impact upon practice and fell off the radar. Perhaps one of the most enduring of these SMA techniques is the BSC which sought to link accounting and strategy in such a fashion that management accounting information became implicated in monitoring the performance of the organisation in relation to its stated objectives and goals. The BSC has indeed had a considered and measurable impact upon business practices to such an extent that numerous surveys point to its implementation in various organisational sites (Ax and Bjørnenak, 2007) and the practice has been codified in existing undergraduate texts (see for instance, Drury, 2008) as a defining modern practice. It also embodies the espoused linkages between strategy and accounting.

However Kaplan and Norton (1996) also suggested that the BSC can be used to create value for the organisation, supported by a deeper association between accounting measures and strategy. Similarly there have been utterances from others (Ittner and Larcker, 2001) on the proposition that some versions of SMA can also be used to create value.

The conceptual grounding of these models, as well as other SMA techniques, can be traced back to the writings of Porter (1980; 1985), where his conceptions of generic strategies and the value chain have had a considerable impact upon the development of SMA models, and the advancement of strategic management as a separate field of study. However, it is the writings on the value chain that is relevant for this section.

The concept of the value chain noted above was elaborated by Porter in 1980 and again in 1985. Within his analysis, Porter (1985) focused upon the environment in which organisations operated, specifically the external conditions they faced, in their respective industry, but attention was shifted to the internal dimensions of strategy. At the heart of this focus was the concept of the value chain, a diagrammatic conception of the internal processes of production or service delivery within the organisation. Porter then located these factors of production contiguous to the broader industry chain, of which the organisation forms a part. This industry value chain subsumes all of the activities required to transform raw materials into a product or service which can then be purchased by consumers; however any organisation's value chain might not incorporate all of these industry activities which form part of the overall industry value chain.

This figurative representation of the chain of production as a value chain incubated principles that successive production processes involved in turning raw materials into finished products are representative of value-adding activities. A central tenet of Porter's analysis lies in his argument that the ability of any organisation to generate profit depends upon its ability to realise added value.

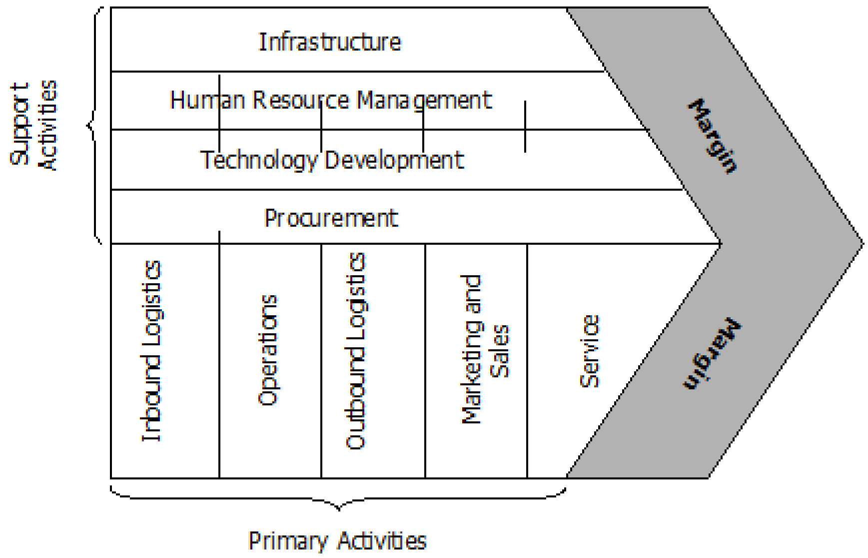

Figure 3.1 Generic industry value chain (Porter, 1985)

The generic value chain advanced by Porter envisages the organisation as a series of linked production functions, exemplified by give primary activities: inbound logistics; operations; outbound logistics; marketing and sales; and service (see figure 3.1). These five activities (as explained in table 3.1) can, as remarked by Porter, in their entirety be inclusive of the production process as a whole, or form a diminutive part of the overall industry value chain.

The value chain supports strategy and can create value when paired with cost positioning and cost analysis, as through an enhanced focus of cost drivers an organisation can understand the relation between cost behaviour and the range of activities across the value chain (Shank and Govindarajan, 1993). This point is addressed in more depth later in the chapter.

In addition to the value chain, subsequent research has also included the notion of value added (McNair *et al.*, 2001), where the relation between cost behaviour and value is deepened to examine strategic focus and how performing particular activities can add value to the organisation. In a broad sense, a focus on value adding also identifies potentially wasteful activities in that their repeated performance does not add value to the organisation, or indeed to the customer (McNair *et al.*, 2001), but actually destroys value in the short and longer term.

Inbound logistics	These are activities that are associated with the transportation and storing of raw materials, including materials handling, inventory control, and vehicle scheduling.
Operations	These are activities necessary in production of the final good and encapsulate production processes that transform the raw materials and subsequent work-in-progress inputs into a final saleable product, including machining and assembly, packaging, and service-type activities as maintenance of equipment and facility operations.
Outbound logistics	These are activities incurred in transporting the complete product to buyers and retailers, including activities of physically distributing products as handling and delivery. Also included here are activities conducted in order to process orders.
Marketing and sales	This category generally relates to activities that are associated with advertising a product and informing consumers of availability in order to induce sales; included here are advertising, promotional, and pricing activities.
Service	Finally these activities accord both the provision of services to enhance the value of the final product, such as site installation and parts supply, as well as after-sales services such as repair and training.

Table 3.1 Value chain activities, adapted from (Porter, 1985)

Nonetheless, Porter's proclivities towards the necessity of conducting strategic analyses of an organisation's sources of competitive advantage has impacted upon the development of the field of SMA, as outlined in the previous chapter, and his conceptualisation of the value chain and value adding activities have equally produced intense discourse around issues of securing sources of value through the sponsorship of VCMA. For instance some researchers (McNair *et al.*, 2001; Skoog, 2003) make use of 'value adding activities' concept and examples of techniques that make explicit reference to the value chain in demarcating sources of potential and realised value to the organisation.

Consistent with other branches of management accounting, however, practices and techniques vary in respect to their divergent use in practice (Martin and Petty, 2000; Malmi and Ikäheimo, 2003), such that whilst techniques might be presented as solely for monitoring the worth of intangible assets, frameworks might be developed which utilise the same technique in order to assess performance in conjunction with financial worth. Consequently, what is presented here is an analysis of how techniques are presented in the literature. Concession to practical context(s) and operation of these practices is given in chapters 5 and 6 through the use of two case studies.

3.2.2: Key Techniques

Ruminating upon contemporary practices, it is possible to distinguish much of the normative writings associated with SMA and performance measurement as part of the techniques under investigation here, particularly as earlier versions of some techniques discuss, at length, possible avenues of value creation (see Kaplan and Norton, 1992). Furthermore, it is also possible to deliberate managerial awards and methods, such as the Deming Prize or Baldrige Award, as inclusive of value creation owing to their focus upon VBM and the capacity to define and explore avenues of value (see Ashton, 2007). However, in the same way that it is not prudent to examine in great depth each possible technique under NMA, it is similarly not possible with time constraints to devote space to each of these potential practices of value creation. As others (Scapens, 1993; Puxty, 1993; Shotter, 2001) have traced the development of management accounting around issues of decision making, planning, cost accounting, performance measurement and reporting, thus this thesis will yield to similar conceptions of MAP. Furthermore, IFAC (1998) have guided the development of VCMA as those techniques being representative of attempts to use resources to create value; consequently, attention is drawn to customer accounting, human resource accounting and employee reporting, intellectual capital practices, economic value added and related models of cash flow valuation, and strategic cost management as examples of VCMA. Finally, limited attention will also be drawn to the balanced scorecard as management tool with potential for creating value.

3.3: Customer Accounting

Representative of a series of valuation and profitability metrics (see, Guilding and McManus, 2002; Lind and Strömsten, 2006), customer accounting can be identified in three areas of development: Customer Profitability Analysis and Customer Segment Profitability Analysis; Customer Lifetime Value and Lifetime Customer Profitability Analysis; and Customer Equity.

3.3.1: Customer Profitability Analysis

Customer Profitability Analysis (CPA) encapsulates several different techniques of investigation (Weir, 2008), for example, within the accounting literature, CPA calculations are referred to as Customer Profitability Analysis, and Customer Segment Profitability Analysis (CSPA) (Guilding and McManus, 2002; Lind and Strömsten, 2006), whilst in wider business literature a generic approach termed Customer Accounting Profitability (CAP) has been identified (Foster and Gupta, 1994).

As posited by some researchers (Bellis-Jones, 1989; Foster and Gupta, 1994) the logic behind understanding customer profitability is that company's revenues can differ across customers purchasing the same product. Foster *et al.* (1996) acknowledge that some 'dollars', and hence some customers (*cf.* Pfeifer *et al.*, 2005) contribute more than others to the net revenue of the firm. Hence there is a platform for managers to understand the net effect of these differences between customers; and it is here that customer accounting is claimed to be of use (Cooper and Kaplan, 1991; Kaplan and Narayanan, 2001).

3.3.2: Customer Lifetime Value

Customer Lifetime Value (CLV) is an area of customer accounting where the focus is advanced beyond the examination of current levels of profit and has extended the analysis to future periods, emulating a type of NPV calculation (Weir, 2008).

However, a long-term version of a CPA metrics (LCPA) was documented by Cooper and Kaplan (1991) in a case study of a bank which attempted to uncover which of their customers were profitable in future periods. The model involves a 3-part calculation is summarised by Weir (2008) who claims that the model merges a loan-pricing model with a generic CPA calculation, where resulting outcomes are adjusted with a risk-adjusted Return on Equity calculation. In this manner, customer profitability reflected a risk-adjusted number that placed a value on long-term financial commitments of either individual customers, or customer groups, over the lifetime of the loan agreement; subsequently, LCPA broadens the time frame of customer analysis and includes revenues from both previous years and estimated future performance (Berliner and Brimson, 1988; Foster and Gupta, 1994), where associated future customer revenue and costs are calculated on accrual principles (Guilding and McManus, 2002; Pfeifer *et al.*, 2005; Lind and Strömsten, 2006).

However more space and attention has been given to CLV studies in recent years (Blattberg and Deighton, 1996; Berger and Nasr, 1998; Reinartz and Kumar, 2000; Gupta and Lehmann, 2003; Rust *et al.*, 2004; Bauer and Hammerschmidt, 2005; Berger *et al.*, 2002; 2006; Gupta *et al.*, 2006). In spite of this, no one particular measure of CLV has been generally accepted (Bauer and Hammerschmidt, 2005; Weir, 2008), nor has any research synthesis taken place (Bauer and Hammerschmidt, 2005). Consequently, a number of techniques are present in the literature and each places importance on different aspects of the customer relationship (see, Gupta *et al.*, 2006).

The CLV literature documents at least six different types of CLV metric, including: probability models; RFM models; computer science models; econometric models; persistence models; and diffusion/growth models (Gupta *et al.*, 2006). Each model consequently focuses upon a different aspect of the customer relationship, however similar variables are present and the resultant calculation involves some measure of discounting estimated customer future gross profits over the expected tenure of the customer relationship (Weir, 2008). A generic approach of CLV, is taken from Berger *et al.* (2006):

$$CLVi = \sum_{t=1}^{n} \frac{(\text{future gross profits}_{it} - \text{future costs}_{it})}{(1+r)^{t}} \qquad \text{(Equation 1)}$$

Where

i = customer index,

t = time index,

n = forecast horizon, and

r = discount rate

In this generic model, estimated future gross profits are based on expected future revenues based on the deduction of cost of goods sold (and other associated customer costs or overheads). Future costs are those which are traceable to any customer (either on an individual or segment basis), for instance any service costs incurred in customer transactions.

Future customer revenue streams are then discounted and forms a common element to generic CLV metrics (Pfeifer *et al.*, 2005). The time period of analysis can be any chosen by the company, but is often presented as the expected length of relationship that the firm has with the customer, and typically reflects the amount of time that a customer is expected to be loyal to one particular company (Weir, 2008).

The approach of using a CLV metric regards customers as assets (Boyce, 2000; Rust *et al.*, 2004), and creates future cash flows and are then discounted, reflective of standard finance methodology of the financial evaluation of assets. Customers are viewed as investments and hence subject to NPV calculations. Subsequently, there is an influence of financial theory on the development of CLV metrics.

An idea of purchasing cycles also becomes important for CLV, as there is an assumption that both products and customers operate with difference purchase cycles and at any time during a given trading period (be it a present or future period), a customer can engage in cross buying. In these periods, the company is not enjoying a full relationship with the customer (Dowling and Uncles, 1997; Berger *et al.*, 2002), and so models have been developed to emulate the product, or company, switching behaviour that is entailed in cross-buying, so that more reliable estimates of customer behaviour can be drawn during a specific period of analysis (Berger *et al.*, 2002). This has impacted on CLV models through the inclusion of retention-based and migration-based models.

Retention based models differ from migration models with regard to their treatment of the buyer-seller relationship, as migration models assume that customers have several suppliers and customers decide when to purchase from any supplier. Rust *et al.* (2004) claim that it is impossible for any business to retain all customers and follow Jackson's (1985) conclusion that some are 'lost for good' owing to the inherent difficulty of satisfying 100% of a customer base. Migration models have developed a proxy variable for this assumption utilising the last purchase date as an indicator of the probability of future transactions (Dwyer, 1997), simulating some effect of customer migration patterns. However, migration models are not a common element of CLV metrics (Gupta *et al.*, 2006; Weir, 2008).

Retention models, conversely, estimate percentages of customers that remain loyal to a product or company in any trading period, where proxy measures or loyalty include measures of customer satisfaction (Kaplan and Narayanan, 2001) and switching costs (Dwyer, 1997).

Consequently, advances in customer behaviour research have enabled variables of retention and migration rates to be developed and included in CLV metrics. Equally, statistical modelling has been used to examine fluctuations in the customer base, including the use of econometric models and probability models (see Gupta *et al.*, 2006) and Markov chain models (Villaneuva and Hanssens, 2007), where the emphasis is upon predicting changes in the overall volume of customer transactions, and hence movements in overall customer value.

In addition, other variables such as fees and costs of termination of the customer relationship have been included in the marketing literature (Bauer and Hammerschmidt, 2005). Moreover, the developments in customer value theories have provided more elaborate CLV models (for an overview, see Gupta *et al.*, 2006) and such models become more entrenched in financial and econometric calculus (Weir, 2008).

However most CLV models do have a similar theoretical grounding, in that generic models of CLV, as well as the elaborate models, resemble an NPV calculation in order to calculate the return (and hence value) generated from a particular customer of customer segment over a period of years.

3.3.3: Customer Equity

Customer Equity (CE) is described as the sum of individual discounted lifetime values of both present and future customers for the duration of the time they continue to transact with the company (Weir, 2008). However, various approaches have been developed (Blattberg and Deighton, 1996; Bayon *et al.*, 2002, Rust *et al.*, 2004) and no overall model has been accepted. Similarly, no synthesises of models has taken place.

CE was first proposed as a means of establishing an optimal balance between customer acquisition and customer retention (Blattberg and Deighton, 1996), where optimality was reached at the highest points of CE. Emphasis of CE has shifted in recent years towards a process of measuring firm value (Gupta *et al.*, 2002) by adopting a value-based approach to calculation (Bayon *et al.*, 2002, Rust *et al.*, 2004) and thus of finding sources of value that increases returns to shareholders (Bayon *et al.*, 2002). Here, the influence of finance-oriented measures and theories of firm value become important for the development of CE.

Equally, consumer behaviour studies, such as duration of customer retention (Bayon *et al.*, 2002), and the associated developments in CLV, such as modelling cross-buying, led to the extension of studies in CE through the development of a conceptual basis on which to construct notions of CE (Weir, 2008), where the essential principle is the creation of firm value as determined from customer lifetime values (Bayon *et al.*, 2002; Richards and Jones, 2006). Behavioural studies have provided a basis to understand customers, based on, for example, their cross-buying habits, and in turn this can assist managers in seeking and identifying potential new customers (Weir, 2008). CE calculations also impart a dimension of financial accountability as effects of strategic marketing expenditures upon customer value (and firm value) can be measured against any changes in CE levels such that particular marketing strategies can be assessed according to whether they have led to increases in both customer and firm value.

Similar to CLV models, differing areas of the customer relationship are emphasised by different scholars in developing measures of CE. However, a common approach (see Bauer and Hammerschmidt, 2005) models three aspects. Firstly, lifetime values for individual customers are calculated, per equation (1) above. Secondly, customer acquisitions data for a given trading period is collected, and CLV calculations are performed on newly acquired customers. In the final step, CE calculations are performed: this adds the resulting figures of the previous tasks and is then discounted to the present trading period. This can be placed within one model[4]:

[4] A more complete deconstruction of this model is presented by Weir (2008)

$$\mathrm{CE} = \sum_{s=0}^{T} \frac{1}{(1+d)^s} \sum_{k=(v_{s-1}+1)}^{v_s} \sum_{t=s}^{T} r_i^t \frac{(R_{ti} - C_{ti})}{(1+d)^t}$$

Equation (2) (source: Bauer and Hammerschmidt, 2005, eqn. 5)

The logic of CE is that metrics can provide a basis for calculating the ROI of any strategic investment, with some emphasis placed upon evaluating shifts in firm equity (Andon *et al.*, 2001; Bauer and Hammerschmidt, 2005; Gupta *et al.*, 2006).

In addition, further sub-components or drivers of CE value, including value equity, relationship equity and brand equity have been considered by researchers (Zeithaml, 1988; Rust *et al.*, 2000; Richards and Jones, 2008).

Value equity is summarised by Richards and Jones (2008) and refers to any customer's assessment of a brand based on their utility position, and customers specifically assess the associated opportunity cost of purchasing a brand (Zeithaml, 1988; Richards and Jones, 2006). Here also a customer's evaluation of price, quality and convenience can impact upon value equity (Rust *et al.*, 2000; Richards and Jones, 2008) as lower perceived quality might carry lower perceptions of brand value and discourage the customer from purchasing. Value equity is argued as being a key constituent of CE, as there may be no incentive for customers to make repeat transactions if there is no associated increase in their utility once an initial purchase has been made (Rust *et al.*, 2004; Richards and Jones, 2008).

Relationship equity is categorised as an important link between the customer and the brand, which reinforces existing relationships beyond value equity (Richards and Jones, 2008). Loyalty schemes and retention programs may be used here to measure relationship equity (Rust *et al.*, 2004; Richards and Jones, 2008) as such strategies are claimed to be customer-oriented and attempt forge longer-term relationships that stresses the importance of the customer to the company (see, for example, Verhoef, 2003).

The final sub-component is brand equity, and can be characterised as consumer awareness of a brand, and encapsulates customer attitudes to the brand (Richards and Jones, 2008), and can include subjective perceptions of issues such as company and brand ethics. Subsequently brand equity extends the concept of value equity and contains elements of wider brand perception and image as well as brand meaning (Richards and Jones, 2008; Rust *et al.*, 2004). Such subjective elements of a brand may impact upon customer perception of both the company and the brand, hence reducing acquisition and retention rates in cases of poor brand image. An element of complexity is presented to scholars that attempted to model brand equity as it is often portrayed in the literature with different meanings (Villaneuva and Hanssens, 2007). To be sure, both brand equity and customer equity share similarities (see, Kumar *et al.*, 2006), as both attempt to measure an intangible value of marketing assets (Weir, 2008) and both concepts also place customer loyalty as the fundamental idea of investigation (Villaneuva and Hanssens, 2007).

Yet again, there is no complete consensus regarding the role of brands in CE, with some (see, Blattberg and Deighton, 1996) viewing customers as the main source of firm value, suggesting that brands are only a mechanism that increases customer equity, and that brand strategies are subservient to customer management schemes. Equally the converse is true where proponents claim that brands have ultimate importance, as they attract the customer and draw value for the firm.

Analysis

Customer Accounting as a metapractice, refers to a set of techniques that provide a value on organisations' customer base. Thus customer accounting readily acknowledges ideas from marketing and consumer behaviour that some customers are more valuable than others. Moreover, developments in strategy literature also impacted upon the development of customer accounting by providing a context in which to analyse customer value. As a holistic theory then customer accounting is not abstracted from social, historical or cultural contexts, and neither is circumstances assumed to be stationary. To elaborate on these points, customer accounting concedes that customer buying patterns are changing and insights from marketing and strategy are used in conjunction with CLV calculations in order to evaluate which customers with particular buying patterns are the most desirable for a firm to have as part of their customer portfolio. However the analysis also assumes a lifetime relationship between firm and customer, such that constant real incomes are assumed and measured in CLV and CE analysis, whilst CPA does not make this assumption. Furthermore, pertaining to CLV and CE, the analysis assumes that information about customer buying patterns and their switching habits is known and is available. In this sense, the information is 'perfect' for the analysis under customer accounting, in that buying patterns and switching habits are necessary in order to conduct strategies for holding a valuable customer portfolio. In addition, this information is assumed to be available from external market sources at no cost. The final key assumption underlying customer accounting relates to uncertainty. Analysis from CLV and CE acknowledges that customers will switch from company to company, and can do at any given time. However models have thus far been mis-specified in trying to examine customer exit rates and timings. Hence there seems to be some attempts to measure uncertainty in the analysis, and risk adjustments have been made in CLV analysis by the inclusion of more variables. In a sense, customer accounting is not limited by seeking to provide only determinate solutions, but attempts at doing so are, conversely limited. Consequently, researchers admit that the prediction of future and potential customer buying patterns and potential customer values are uncertain, but the models they emphasise and develop, do not make the same concession. As a result, it would seem that customer accounting is still somewhat limited by uncertainty in the models.

Whilst customer accounting has developed from notions of aligning activity based costs to measure customer profits (Cooper and Kaplan, 1991) to measures of firm equity in the accounting and finance literatures, the grounding assumptions in neoclassical economics are still evident, despite researchers being influenced by developments in the fields of marketing, consumer behaviour, strategy and financial modelling. This might indicate that perhaps these fields are equally influenced by NCE also, but this would be another topic for another time.

3.4: Human Resource Accounting and Employee Reports

Characterised by ICAEW's (2000) report, as well as related writings by consulting groups (Stewart, 1997), organisations that operate and compete in the new or knowledge economy (Edvinsson, 1997) have less reliance on traditional resource based commodities and require less investment in capital equipment owing to the greater emphasis that is placed on high value added services and intangible-based output. Such organisations have driven the need for developments in human resource accounting and intellectual capital reporting, as these organisations rely on human skills, competences and corporate know-how as a source of competitive advantage, and as a source of value creation (Stewart, 1997; Van der Meer-Koistra and Zijlstra, 2001). Traditional financial accounting frameworks inadequately reflects this information, and GAAP in particular is seen to constrain IC and HR practices (Sveiby, 1997; Roos *et al.* 1997). Indeed, Likert (1967) expressed some thirty years previous concerns over the short-termism of financial reporting, conceding that the focus of financial reporting systems neglected investments in human skills and knowledge, postulating that a model of accounting should be developed that visualises the financial effect of human resource activities.

Human Resource Accounting (HRA) is the process of identifying, measuring and communication economic information about an organisation's human resources and was widely researched in the late 1960s and early 1970s. Methods were developed for measuring and reporting the value of Human Resources (HR) in monetary units at the individual, group or organisational level. The main aim of this research was to capitalise and report HR value and to amortise it in a manner similar to other physical assets. Hermanson (1964) identified this as a balance sheet issue, specifically that human assets are not 'owned' assets, instead they are 'operational' assets, and for Roslender and Dyson (1992) to enhance the value of financial statements, it becomes necessary that both asset categories are included on the balance sheet. Initially the main drive behind HRA was a balance sheet approach and as a result most of the tentative forays into this area were primarily driven by the conventions of financial reporting. Each of these models attempted to account for people in this manner by treating investment as an accounting calculation and treated human resources as any other asset owned by the company by including them in the accounting system (Mouritsen and Johanson, 2005), as far the prevailing accounting rules and conventions would permit. Flamholtz (1985) assessed such accounting-based models of HR costing and postulated four basic forms of HRA: Accounting for human resource costs, accounting for human resource investments, accounting for HR values, and an integrated HR accounting system. Through enmeshing HR and accounting, such early attempts to value HR relied primarily upon accounting terminology and concepts. In a similar vein to customer accounting, early attempts were highly reliant upon conceptions of profit and cost, as well as frameworks traditionally associated with financial accounting, such as the balance sheet.

Constrained by the limits and legalities of financial reporting standards and practice, contemporary attempts to value and account for people have been developed that have moved away from a financial accounting emphasis as a basis, towards a managerial approach, driven by terminology as costs, benefits, and valuable resource. Equally, some methods have fully embraced the existing models of financial reporting to communicate to investors (and interested parties alike) the value of a company's HR.

The related rise of intellectual capital research has presented employee skills, knowledge and competences as a component of a firm's intangible asset resources. This position will be fully elaborated in the section on intellectual capital, but for now it is only necessary to note that IC consists of three main components of value capital: human, structural and relational. Human capital has been claimed by some (Stewart, 1997; Roslender and Fincham, 2004) to be the most important component in the IC categorisation, and subsequently there have been attempts to account for the value created by HR that are presented as separate developments from those accounting techniques and reporting models presented under IC.

Generally, there are three main streams of technical research in HR including: attempts of human resource cost accounting (HRCA), the development of human resource reporting models (HRR), and financial models of firm value as determined by human resource investment and activity (HRV).

3.4.1 Human Resource Cost Accounting

Despite the attempts and emphasis to 'put people on your balance sheet', researchers moved away from the influences of financial accounting (Hekimian and Jones, 1967). The purpose of accounting for human assets shifted to provide a means of ensuring that senior management are able to recognise the value of their employees (Hekimian and Jones, 1967; Flamholtz, 1974), and was based on the idea that placing a monetary value on employees was in the interest of their better utilisation. This blends into recognition of the importance that people are valuable organisational resources. Human resource decisions were urged by some (Flamholtz, 1974) to be based on an assessment of cost and value (benefits) involved, bringing more emphasis to the managerialist leanings that HRA was beginning to conform to, whilst simultaneously shedding the previous notion that HRA was solely to provide information to investors about an organisation's human assets. This brought HRA closer to management accounting theory from the domains of financial accounting as leaving behind the provision of information to investors meant that HRA would no longer assist in valuing an organisation, through placing HR on the balance sheet. In Flamholtz's view (1974) HRA is concerned with a wider spectrum of human resource decisions than just reporting HR value on the balance sheet, implying also that non-monetary aspects of HR value were also important topics for HRA to address.

However, the dominant focus in HRCA was primarily financial, and interest in the subject began to dwindle. Prior to the recent resurgence in the 1990s and mid-2000s, there were three predominant approaches to measuring HR value (see Scarpello and Theeke, 1989), which were:

1. Historic Cost: cost to acquire determines value;
2. Replacement Cost: cost to replace determines value;
3. Future Returns: Various approaches

Under historic cost approaches, the rationale is that there are fewer measurement problems in HC, as in conventional financial asset accounting. Wages are a periodic expense appearing separately in financial statements, and can be easily identified and traced to productivity. Various HR costs involved, such as recruitment and training can also be traced through the financial statements and expensed against the potential or measurable worth of an employee in HC specific measures or statements. A HC view of HR is, however, difficult to operationalise on the balance sheet, because fixed costs usually allocated to departments would have to be attributed to individuals. Stemming from this, there are reliability issues in that some employees may be more valuable than others and a fixed cost allocation may not reflect this differential in contribution. Flamholtz (1985) moved away from an accounting notion of HR and attempted to distinguish values along stochastic means, echoing a wider dissatisfaction with HC as a means of determining value and worth.

Under RC HR, personal replacement cost is wider than positional cost. It is cost of replacing someone with their equivalent skills or knowledge and it also relates to progressive career notions of 'how far this person would have gone in firm'. But this is difficult to know; it is also more difficult to quantify owing to fundamental uncertainty over future revenues and costs. Issues of generalisability across employees also emerged as a dominant problem in research in this area (Cascio, 2000).

Under FR HR, various models exist. Scarpello and Theeke (1989) note that it is difficult to understand why there has been no serious effort to develop valid and reliable measures and metrics to determine HR value, claiming that until a valid and general means for measuring HR value in monetary terms is demonstrated, further consideration of benefits from HRA should be abandoned. A view echoed in later periods by Cascio (2000) who felt that these main attempts at valuing HR were problematic in that firstly, the historical cost method has shortcomings; secondly relative to the historical cost approach, subjectivity is increased when adopting the replacement cost method; finally, that the present value method is simply inadequate in treatment of revenues and employees. Cascio does, however, suggest a method which he feels is adequate for HRA. The previous methods, he reasoned, only focus on HR inputs, signalled as investments in people, and neglect outputs produced by employees. Consequently Cascio ignores the asset approach of previous approaches and focused upon an expense based model; this also recently adopted and extended by Theeke (2005) and Theeke and Mitchell (2008). At its heart, the approach takes expected HR costs, as determined through HR policies, and recognising them as future expenses. However, the approach is also entrenched in financial accounting language and details, particularly as the most recent developments to the approach (Theeke and Mitchell, 2008) measure the effect of these future expenses upon asset values (as through policy costs upon asset turnover and return on asset ratios) and with respect to debt (through gearing and leverage ratios) as well as cash flow. In its most recent guise, Theeke and Mitchell (2008) advanced this approach as a liability paradigm of HR and as part of the resurgence of academic interest in HRA, followed the logic of earlier financial accounting approaches, taking the inverse of earlier asset view of employees and extending the balance sheet approach to valuation, and financial theories of value, through the auspices of financial ratio analysis.

Whilst earlier streams of thought have been returned to in developing contemporary models of HR value and in attempts to formalise theories regarding HRA, alternative ways of viewing HRA have also been proposed utilising softer or non-financial information, with proponents of such an approach (Roslender and Dyson, 1992) aiming to take HR beyond the balance sheet and taking employee worth (instead of the cost and asset approaches) as a central tenet in advancing a concept of human worth accounting. Roslender and Dyson (1992) linked worth to notions of value adding employees through the recognition that organisations would be more likely to retain services of employees who add value to the business in terms of their contributory skills and knowledge towards achieving growth and competitive advantage. Roslender and Dyson (1992) consequently argued that the practical approaches developed in earlier contexts lacked practical applicability and looked towards Scandinavia for advancements in HRA methodologies.

Telia's published HR reports have been the focus of some research in HRA (see Flamholtz and Main, 1999), and the reports have gradually been increasing in scope and content from basic additions to the balance sheet to comprehensive annual HR report charting movements in financial performance and target achievements. Telia are a Swedish organisation and their managerial approach places great importance on employees as they are deemed to be vital to success and the achievement of strategic objectives (*Ibid.*). This is represented in their HRA approach of publishing HR specific balance sheets. Whilst Telia is representative of a popular topic for HRA amongst researchers, it also returns to a financial accounting approach. As Roslender and Dyson (1992) noted, however, research and practice did develop in Scandinavia where NFI was used to advance the subject of HRA. The notion from several researchers (see Edvisson, 1997) that the current business climate has changed the way in which business is conducted has been used as a grounded logic for developing NFI measures of HRA, particularly as the resulting shift in the business environment has led to more emphasis on the intangible aspects of business and the widespread use of the phrase the 'knowledge economy'. Linked to this, it has been proposed that in today's economy, the workforce is the main source of a company's competitive advantage (Verma and Dewe, 2008).

Additionally, the notion of the knowledge economy brought with it an increased focus on intellectual capital, of which employees are an important aspect (Edvisson, 1997;

Stewart, 1997). Numerous recent techniques and HRA practices based on these logics include a range of techniques that are more varied in nature and represent a wider range of influences not solely limited to a financial accounting perspective. Some of these techniques include, but are no exclusive to the following:

Return in investment; Intellectual Capital Index; Human Capital Index; EVA; Tobins' Q; BSC; Human Worth Management; and Human Resource Expense Models.

As is readily evident, financial modelling and management accounting have had an impact on HRA research. For example, the inclusion of BSC into HRA indicates some overlaps with the remit of SMA, whereby the guiding rationale is the search for competitive advantage; similarly, financial modelling and value based management have collided with HRA through the auspices of measurement indices and EVA.

However, HR reports used and developed internally are usually conducted alongside Human Capital Management (HCM) systems. In such instances, HCM reports usually have a strategic focus, providing a link between HCM, business strategy and performance. HCM reports contents are summarised by Roslender and Stevenson (2009) these can typically include information on: size and composition of workforce; skills and competence of workforce; retention levels and practices; motivation; training schemes and practices; remuneration; employee fairness and equality practices; leadership; and succession planning. In addition there are other measures used to analyse shifts in performance across either individual, or groups of, employees and these highlight the strategic underpinnings to HCM measures whereby HR performance is aligned to overall strategy and evaluated in terms of specific policy impacts upon business results, particularly as studies linked training programs to productivity and value growth (Bartel, 1994), allowing competitive advantage and value creation to be explicitly linked to these measures and schema. Barney (1995) highlights this link noting that cluster analysis of bundles of HR practices can trace the effects of adoption upon performance and value growth.

In terms of measuring HC in HCM, various dimensions of capital and capital management practices are assessed, as above, in terms of their outcomes and effectiveness. Alongside this, numerous NFM are used also, such as measures of customer satisfaction, lateness, absence (Guest *et al.*, 2000), in addition to organisational wide performance based on employee turnover and quality of service provision. Key in these measures are to examine performance indicators as they are reflective of employee attitudes and behaviours and act as a measure of internal performance (*Ibid*). These can also take the form of internally produced HCM reports, which are narrative in content, and address how performance has related to employee contribution and HC management practices.

Finally it would be worth noting that a newer set of HRA practices have developed around notions of employee wellness, primarily limited to use in Scandinavia (Mouritsen and Johanson, 2005), such health statements or Personnel Policy Statements have brought to the fore central concerns over sickness rates (Roslender *et al.*, 2009) and are viewed by some (Mouritsen and Johanson, 2005) as a way to make visible, and thus manage, rates of employee sick leave.

Analysis

As an area of study, HRA was initially motivated by attempts to classify employees as assets and place them on the balance sheet. Influences for such a motivation stemmed from financial accounting theory, in particular the balance sheet model and asset definitions. However, as HRA moved away from the rigidity of GAAP and accounting conventions, it developed into a more fluid research area. HRA, as it exists in the MA literature today has been conceptualised as means of gaining and sustaining a competitive advantage, centring on issues of providing estimates of human worth, specifically considering how HR contributes to an organisation's success rather than by how much they contribute in a financial sense. Research and techniques in this area inherently place a large emphasis on the use of softer accounting information. Related to this softer approach are narrative reports such as those used by Telia and Human Capital Management (HCM) reports.

What emerges here is that there are an increased number of variables being considered under narrative HR reporting. Furthermore, there are no explicit assumptions regarding stationary circumstances. Researchers admit that employees may lose motivation and in these circumstances, reports and related performance measures included as part of some HCM reports attempt to reinvigorate unmotivated employees through the provision of targets. But this asserts the influence of NCE on another key area of HRA, vis-à-vis abstraction, as analysis of motivation in HRA assumes that human behaviour can be reduced to choices and decisions of isolated individuals. Motivation is seen as something that can be easily gained by employees, and that choices and decisions made within the organisation can properly motivate an individual, abstracting the individual from their social, historical, political and cultural contexts. Furthermore, akin to micro-economic analysis, behaviour of an individual is linked to the behaviour of a collective society. By conceptualising the organisation as a micro-society, the behaviour of the individual worker or employee is assumed to reflect the collective behaviour of the rest of the organisation, as it is anticipated in HCM that, for example, performance reviews and meeting targets will collectively reward and hence motivate employees a particular department of the organisation. Ignored, or abstracted, in this assumption is interrelationships between employees and groups of employees. As a result, narrative forms of HRA can be seen to abstract analysis.

Incentives for rewards also stem from the assumption that employees are utility maximisers, and in line with agency theory, rewards are provided for working towards the goal of a collective, in this case the goals are set by management.

Not included in narrative forms of HRA are assumptions of any kind regarding uncertainty and incomes. Instead, these assumptions can be found in valuation models. Contemporary practices of HRA also include attempts at valuation of the financial contribution of HR to the overall financial performance of the organisation. Within valuation models there are two types of metric: those that value individuals, and those that measure groups. By valuing individuals, the basic model uses conditional values, where an employee's potentially realisable value is a function of the present value of potential services to the organisation and the probability that the individual will remain an employee (Flamholtz, 1999; Flamholtz et al., 2004), which is determined through the analysis of staff turnover figures.

While this recognition of potential staff turnover represents a departure from NCE assumptions of determinate solutions, it also leads to another in HRA – opportunity cost. Under individual valuation metrics, the expected conditional value of an employee is the maximum potential value, which can then be compared to the expected realisable value with the difference representing the opportunity cost of turnover. From this comparison, the organisation can get a sense of how spending levels on training can reduce the rate of turnover (Flamholtz et al., 2004), and so the notion of opportunity cost in HRA can be used in a strategic sense to investigate potential effects of training strategies and turnover rates upon individual employee values. However, this assumes static organisational processes (Flamholtz, 1999) and further assumes that employee skill levels, motivation and attributes are unchanging.

By extending the models to consider groups of employees, valuation can be conducted by measuring changes in the value of the productive capabilities of employees (*cf.* Likert and Bowers, 1969). Implicit in these valuation models are the assumptions that future income streams are constant, and that solutions are deterministic, as the variables included are used to forecast changes in the financial position of the organisation as a result of the changes in the value or HR (Flamholtz et al., 2004), and can also be used to predict future earnings through discounting potential future earnings by attributing a percentage to HR.

Consequently, narrative forms of HRA are only linked to the assumptions of NCE by constructing the employee as a rational decision maker who is abstracted from individualistic contexts. Whilst, valuation models are more rigid in their assumptions and largely conform to the assumptions of NCE, in that employees and managers are motivated by gains in utility and are abstracted; moreover, models include some variables at the expense of others in order to present a reductionist model for decision making purposes. Such models also assume that information is available at no cost, and that it is perfect. Furthermore any analysis proffered by HRA models represents a determinate solution and is not risk adjusted.

HRA as an area of VCMA seems mixed in its exposure to assumptions from NCE. Whilst none of the techniques or approaches referred to as HRA can be directly traced to writings in NCE, some theoretical characteristics are still ostensibly derived from NCE assumptions. Narrative approaches are presented as an alternative to financial reporting, and so in this context the same limitations of financial accounting and reporting apply, in that information is used and presented in a similar manner to financial or corporate reporting. Valuation models are more influenced by financial modelling and advances in the field of HR, in terms of linking clusters or bundles of HR practices to financial performance. Similar to aspects of customer accounting, this marriage of theoretical influences also represents some conformity to NCE assumptions, particularly as financial modelling presents an abstracted, deterministic and reductionist model, where the goal of doing so is to seek an optimal solution (Shotter, 2001) which conforms to the broad aims of neoclassical analysis.

3.4b: Intellectual Capital Models

Following on from HC reporting, there are related ideas and concepts in the field of Intellectual Capital reporting, where attention is turned to now.

Concepts of intellectual capital (IC) and related intellectual capital management (ICM) are related to the creation of value within a business, as the intangible knowledge and intellectual resources of a firm represent intangible sources of value (O'Donnell *et al.*, 2000), which have a proposed capacity to accounting for the creation and delivery of value (Mouritsen and Roslender, 2009) and have been considered for some time to be a source of primary competitive advantage in the contemporary business environment (IFAC, 1998). Despite this acknowledgement of the importance of IC, various definitions and taxonomies exist, such that it is difficult to delineate a definitive notion as to what IC is, and it is often referred to as the collective intellectual or intangible resources of an organisation, and is presented in distinction to the collected tangible assets and sources of value of a company such as machinery and land (O'Regan and O'Donnell, 2000).

The early argument that employees should be placed and valued on the balance sheet is also relevant for IC. Indeed the simplest notion of IC value is represented by the arithmetic difference between the respective book and market values of a company. This is problematic from a valuation perspective, as this difference is commonly referred to as goodwill and also includes aspects of intangible assets. Thus early attempts to measure and reconcile IC balances leaned heavily upon financial accounting practice and theory.

However, as GAAP is restrictive as to what can be identified and included within financial statements, attempts to use this as a base of valuation have largely been denigrated (see, Mouritsen *et al.*, 2001), and companies and researchers alike have sought alternative reporting and valuation frameworks. Numerous attempts have been made using financial modelling and theory as the main influence. Tobin's Q and Calculated Intangible Value (CIV) for instance are some noteworthy inclusions.

As a valuation methodology, the IC model proposed within financial accounting theory is rigid and risks over- or under-valuation of various components, and models specified by financial modelling are perhaps too specific. However, some have persisted in the aspects of accounting, and in the absence of methods specific to financial accounting have developed and identified new bases of valuation (O'Regan and O'Donnell, 2000; Roslender *et al.*, 2009). Perhaps the most far-reaching model is that of the Skandia Value Scheme (Edvisson, 1997).

The Skandia Value Scheme has been developed at the Swedish financial services company Skandia AFS and is linked to the Navigator system also propagated by Edvisson (1997). The Value Scheme differentiates components of intellectual capital into a typology of human capital and structural capital, where human capital is identical to the concept elaborated earlier. Structural capital under the taxonomy refers to capital that remains with the firm when customers go home and includes capital that has formed within an organisation from the development of systems and processes over time; examples can include patents and information systems. This is further divided into customer and organisational capital. The latter is further partitioned into innovation capital (including trademarks, patents and business secrets), and process capital. These components can be seen in figure 3.2 below:

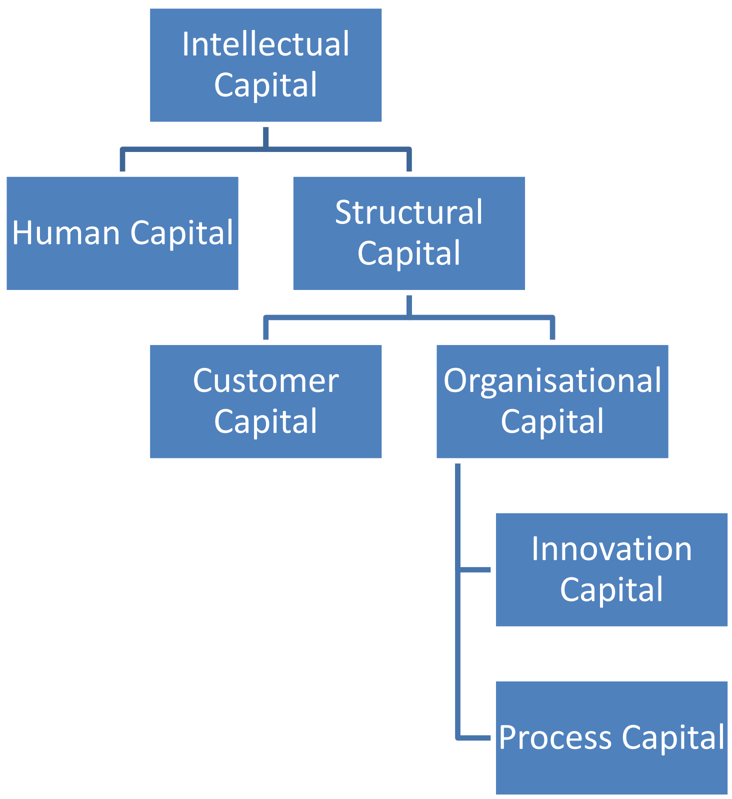

Figure 3.2 Components of intellectual capital, adapted from Edvisson (1997)

In addition to the themes identified by the Skandia Value Scheme, various similar models of IC measurement have been developed, including the Intangible Assets Monitor (Svieby, 1997), which also contain either the definitions of IC proposed by Edvisson or their own characteristics, which are broadly consistent.

Common to most IC models is a distinction between people, external and internal dimensions of IC (O'Donnell *et al.*, 2000), for example Edvisson's human capital is related to Svieby's People's Competence. In addition to these common elements, the numerous approaches that have been developed since all share similarities to the classification proffered by Edvisson (see Roslender *et al.*, 2009). Consequently the ideas contained within IC measurement techniques all acknowledge the components of human capital, organisational or structural capital and relational capital.

3.4b.2: Measuring and reporting intellectual capital

The simplest approach to measuring IC is the accounting method described above as taking the difference between market and book values of a firm. However, contemporary attempts and models have built upon considering the components of IC, and recording these components as the arithmetic difference between market and book values poses difficulties, as the cutting edge of IC reporting can only ever be what GAAP allows it to be. Consequently, using existing GAAP and accounting practice as the base of IC reporting is restrictive, particularly as accounting definitions of IC portend to a collection of broad concepts of valuing intangibles; as such, researchers have mused alternative bases for the measurement and reporting of IC.

Using the Value Scheme as a base, Skandia further developed a model to be used in identifying the hidden values of growth as driven by IC. The Navigator links IC components to five areas of focus: financial, customer, process, renewal and development, and human respectively. The financial focus of the Navigator attempts to map financial outcomes of activities, and is linked to strategy as it is here that goals are created. Goals are then linked to the other four perspectives, where intangible or IC aspects are valued and goals can be evaluated through shifts in long term growth or profits.

The Intangible Asset Monitor (IAM), developed by Svieby builds upon the framework suggested under Edvisson's compartmentalised approach to intellectual capital. The aim of the tool is to measure intangible assets and provides this information through a range of relevant performance indicators. Taking people, or to be more succinct employees, as the central generators of profit IAM follows a perspective based on flow theory (Sveiby, 1997) to convert human actions into knowledge structures which are then directed outwards in the form of external structures, or inwards as internal structures. It is also heavily underpinned by a systems dynamic framework, which is most evident in the 'stock-flow' perspective of how employees and their actions can be transformed into knowledge and consequently value for the company.

Analysis

It is possible to argue that IC, and indeed HR, measures and accounting are constitutive of a widening of the economic search to determine the factors of production, in that value growth is linked with measurement of productivity and utilisation of resources, where IC and HR are two recent, or new, forms of resource and are thus in need of measurement. From an accounting perspective, it is perhaps more closely linked to resource utilisation, as the measures attempt to arrange employees' knowledge and related skills in such a way as to maximise the benefit to the organisation. Implicit in this position is an embracing of a resource based view of value creation, specifically that through effective utilisation of (intellectual) resources it is possible to gain measures of competitive advantage which can in turn lead to a source of value creation relative to competitors. Developing intellectual resources might lead to value gains in the long term.

In this RBV position, employees are seen as a resource to be optimised, and so the same stress upon optimisation in NCE is present in IC and HR models. Both quantitative and qualitative models link performance to value creation, and so various metrics, such as those relating to knowledge, can, in a cluster, be representative of an organisation's search for an optimal solution to the deployment of intellectual resources. The domain of NCE (see Solow, 1957) has traditionally sought to grow value by converting labour and capital into output, and technology can effectively augment labour to increase productivity, such that labour is central to growing value at firm level. These models are representative of this in a broader sense, particularly because of the ability to monitor and augment labour for the purpose of increased productivity and hence value.

Going further on underlying influences of NCE, it is evident that IC reports and measures are partially abstracted from context, as the organisation's strategic position is assumed to be changing. Models are developed in order to maximise competitive advantage in the new economy, and so the organisation is present in an ever changing business environment where internal capabilities and strengths are to be optimised, and so circumstances are assumed to not be stationary and wider social and political shifts in the organisation's position within the industry are implied within the analysis. However, this abstraction is only partial as individual employees are assumed to have no social or political context, in that they are assumed to be unidirectional towards their cooperation to fulfil strategic objectives.

Reductionism can also be traced in IC, as measures of value shift depending upon models and the literature. Indeed, there is an idea in the literature that IC has no complete, or holistic definition, as measures consider highly specific components and stress that subcomponents are vital to driving value. For instance, tacit knowledge is highlighted (Harlow, 2008) as a key driver of value in some instances, whilst in others (Ashton, 2007) it may be ignored. The numerous measures available consequently reduce value creation to aspects of organisational practice that are readily visible, hence measurable, and so IC measures reduce the complexity in the value creation process and lack holism. On this point Gowthorpe (2009) notes that measures are nebulous and that IC metrics cannot penetrate the complexity of IC. To that end, it would be fair to conclude that IC metrics and measurements are reductive in their theoretical presentation.

Perhaps because of this reductionist focus, rational decision making is advanced as a desirable outcome of adoption in several cases, particularly as scholars stress the changed environment as a rationale for the deployment of IC metrics. A key logic here is presented by Sveiby (1997) in that the IAM is advanced along the grounds that it can assist managers in managing their intellectual resources more effectively, allowing contributions to overall organisational value to be rendered visible. Indeed, technical progress within the field, through better IC measures, is key for refining the decision making process, where decision makers are portrayed as being concerned with maximising value. Rationality is therefore an important concern in the development of IC measurement.

3.5: Analysis of EVA and related valuation techniques

Economic Value Added (EVA™) was conceived and registered as a trademark by Stern Stewart Consulting Organisation during the 1990s. Initially seen as a refinement of residual income (RI), EVA was reported to have had a wide impact upon corporate MA practice. The metric extends measure of RI by including adjustments to divisional performance measure which can be distorted by GAAP and issues of non-cash transactions as depreciation, for example. EVA can be calculated as:

EVA = Conventional divisional profit +/- accounting adjustments – cost of capital charge on divisional assets

The valuation technique was developed with the aim of producing an overall financial measure that encourages senior managers of organisations to focus upon the creation and delivery of shareholder value (Stern *et al.*, 2001). This view is based on agency theory in that Stern Stewart equates managerial incentives with share valuation and trading, such that in order to maximise benefits to them, managers will aim to maximise shareholder value.

The logic behind EVA relates to divisional or company performance measures which also stems from this agency view, as Stern claim goal congruence as an overall driver for adoption, stating that compared to alternative measures, EVA is more likely to encourage congruence between performance and shareholder value, whilst also reducing dysfunctional behaviour (Stern *et al.*, 2001). In a wider sense, this transforms EVA from a metric of financial performance measurement into a tool for financial control, in that it can be used as a form of ROI to be used to judge estimates and actual performance against stated targets (Mäkeläinen, 1998).

Some empirical studies on EVA (Biddle *et al.*, 1997; Chen and Dodd, 2001; Kim, 2006; Lee and Kim, 2009; Zimmerman, 1997) support findings that on a general level, EVA does not appear to be as stable or as good an indicator of performance as previously discussed upon its introduction to accounting and business literatures. Indeed, a recent study (Lee and Kim, 2009) contradicts received logic that EVA is superior to traditional measures by finding that EVA holds negative explanatory power and perhaps even suggests a negative association between financial performance, through adjusted returns, and the use of EVA as a measurement tool.

Emerging from this, however, is a sense that EVA derives from financial theories of income measurement and management. RI is a major underpinning to EVA, whilst agency theory has also had a considerable influence on the remit and intentions of EVA.

The importance of agency theory to EVA signals the significance of NCE as an underpinning or overarching sway on the development of EVA. To elaborate; the agency model relies upon marginal economic analysis, but also includes behavioural consideration and adds this concern to NCE model. Often in research, agency theory is concerned with contractual relationships (Scapens, 1993) between members of a firm, tending to focus on two classes or groups of member: the principal (or shareholder) and the agent (or manager). Both principal and agent are assumed to be rational economic persons motivated by self-interest, but both may differ with respect to preferences (Scapens, 1993) or individual actions and beliefs also. Owing to this pull of separate interest, and both parties as motivated by self-interest, there arises concerns that in the scope of employment, managers may act in situations that aim to maximise their own utility as opposed to maximisation of the utility or value of shareholders. Consequently, under NCE analysis, the optimal action is to draw up an employment contract that links the utility of the agent to the utility of the principal, usually by offering incentives to tie the action taken by managers to financial rewards, which then have an effect of increasing shareholder value. In purely economic terms, the contract terms are pareto-optimal (Scapens, 1993) in that the utility of both the agent and the principal cannot be improved without reducing the utility accruing to the other.

Under EVA, the same underlying marginal economic principles apply. The financial reward proffered to managers must be one that maximises manager’s and shareholders’ utility. This is directly reflected in the underlying justification of EVA by Stern Stewart (2005) who claim that value added and divisional performance are tied directly to rewards and incentives to managers in order to provide measures of an increased shareholder value. Consequently the logic of EVA is heavily entrenched in marginal analysis of NCE, as well as the behavioural additions of information economics. The actual metric is based on the cash-profit conventions and relationship as espoused by financial accounting theory, and on financial models of income. Ergo, there is very little change from TMA in the developed EVA metric, as both are heavily developed from the same underlying principles of NCE.

EVA is largely influenced by financial models and theories of income, which extend assumptions of deterministic solutions, availability of information, constant real incomes, reductionism and abstraction. By marrying aspects of agency theory, as an incentive for action, EVA also replicates ideas of decision makers as rational and being motivated by seeking gains in utility maximisation, which through pareto optimality as conceived in agency theory, ties decision makers (or managers) utility to shareholders, such that an act of increasing shareholders utility (or shareholder value) in turn leads to increased rewards for decision makers.

In the same way, abstraction is also evident throughout EVA, as individualistic motivations for behaviour are assumed to be purely financial, and the decision making process, despite being linked to the needs of shareholders via pareto optimality, is abstracted from the environment in which the business operates. Financial incentives, in this sense, are removed from cultural and political contexts as the neoclassical model that underlies EVA omits a number of factors and relationships related to the development of a control system, and issues of social conflict between managers and shareholders are at best deemed resolvable through the matching of financial incentives, and at worst completely ignored in the analysis presented by EVA.

3.6: Strategic Cost Management and Value Chain Accounting

Strategic Cost Management (SCM) rose to prominence as a means to align management accounting function of an organisation to its overall strategy (Shank and Govindarajan, 1993), by means of a value chain analysis (Shank and Govindarajan, 1992). Utilising insights from Porter's writings on the value chain, Shank and Govindarajan (1992) urge that companies undergo detailed evaluations of their value chain relative to the industry value chain and those of their competitors in order to gain a sustainable competitive advantage which is achieved through the following framework:

Identify the industry's value chain, assigning costs, revenues and assets to value activities;

Assign cost drivers that regulate each value activity; Develop a competitive cost advantage through continued revisions of costs, revenues and assets that relate to each activity within a firm.

If the firm's value chain is managed at a lower cost than industry and competitors the firm achieves a cost advantage; hence this framework entails a strategic approach to cost management and subsequent writers have commented upon this function of SCM to support strategic decision making (Lorenzoni *et al.*, 1999). So by positioning cost management within the domain of managerial decision making, cost information (hence accounting) is implicated in the strategy of the organisation.

Furthermore, there are possibilities to include inventory management systems, for example Just in Time (JIT), as explicit management accounting systems aimed at the creation of value. To elaborate the example of JIT, Japanese companies developed systems of inventory management aimed at reducing waste and non-value adding activities, as well as monitoring and reducing long run inventory and logistical costs. These ideas eventually captured the attention of Western companies (McMann and Nanni, 1995).

However, management accounting systems require detailed alterations in order to perfectly mesh with and embed JIT ideologies within an organisation, and management accountants have been criticised for their general failure to move from traditional MAS to JIT supported MAS (Drury, 2000). What is noteworthy of these suggested alterations is the espoused change that is required in the information system that supports decision making, in that a JIT environment requires timely and regular information about suppliers and inventory levels, whilst TMA might not effectively capture this information alone. Boundaries between departments and measures ostensibly collapse as the scope for information gathering increases, and so TMA perspectives on cost are widened by the intention to use it in strategic manners, or to grow value through enhanced value analysis (See Shank and Govindarajan, 1993) where SCM considers sources of value across the value chain and attempts to deliver information based on cost drivers which can be used to assist in analysis where value gains might be positioned along the chain.

Inherent in SCM is reliance upon developments in Porter's research on strategy and the value chain. SCM is also heavily influenced by advancements in operations management (Alawattage and Wickramsinghe, 2008), and innovative product development practices (Anderson, 2006). Given the extent of these influences on SCM, it might be expected that SCM does not share some assumptions from NCE. However, consider that Porter's generic strategies are also intertwined with SCM and value chain analysis. Underlying Porter's strategies is a neoclassical relationship between price and competition, which is rehearsed in SCM.

Analysis

Strategic cost management (SCM) developed as a result of dissatisfaction with traditional techniques in the 1980s; therefore one might expect a large divergence in theoretical underpinnings of SCM compared to TMA. As a result it is argued that SCM and VCA both assume only rational decision makers, constant real incomes and present determinate solutions available at the free cost of information.

Bromwich (1990) undertook a detailed theoretical analysis of SCM, focusing on the use of costing practices in relation to strategy and positioned findings with reference to economic theories of product attributes and competitive market costs. For costs in competitive markets, he noted that existing cost structures should be used to determine whether an organisation can sustain market strategies in industries where potential new entrants can be threatening. In so doing, product attributes are highlighted as management accounting provides information on the cost structure of internal products, as well as the products of competitors. It is thus possible to undertake detailed product cost analysis of competitors' products through SCM.

Further considering the links between cost management and strategy, SCM can be presented as a deliberate attempt to align a firm's strategy with their cost management and cost structure initiatives in order to optimise performance of their chosen strategy (Anderson, 2006). In this sense SCM becomes more that cost measurement as effectiveness of specific initiatives can be monitored and information collected in this process can be used to adjust strategies as necessary. Consequently, the view of SCM here is a more dynamic perspective than that postulated by the underlying neoclassical assumptions. Abstraction is not present in this technique, as the time-space specific nature of strategy is examined and linked to SCM analyses of the effectiveness of strategic objectives. Contexts are identified as being important to the success or failure of a strategy (Nixon, 2006), and so SCM must consider the organisation and the environment in which it operates as separate in order to properly monitor developments; such a distinction is not made in NCE framework (Neimark and Tinker, 1986).

Reductionism is present to an extent in SCM, as monitoring strategic positioning involves taking into account specific circumstances which are not limited to a single firm and includes an analysis of the industry value chain. However, the threat of potential entrants is limited to analysis of shifts in perceived market cost of products. The threat of potential entrants might not solely be limited to market cost, and thus there is primacy given to market concerns over and above, for instance, political or social costs associated with new entrants. Reductionism is also noticed as neglected hidden competitor costs may not be captured through attribute analysis. For instance, whilst labour and wage costs might be easily estimated, in addition to material costs and marketing, there are other attributes in product development that are not readily apparent. Such attributes might significantly add value to the product, but as they are not vital to competitor cost analysis, their inclusion is not necessary, which skews the analysis and presents a misleading interpretation.

SCM, however, does not readily identify that future benefits of a strategic initiative are based on assumptions of uncertainty, as SCM assumes that strategy is driven solely by gains and advantages delivered through better cost management practices. In this manner, SCM still presents deterministic solutions, in that shifts in either cost or strategy are deemed to have an effect on market position, which conceives market shifts as reducible to simplistic and linear relationships with cost. Equally demand is seen to be constant and perfect information is assumed through the ability of an organisation to effectively monitor changes in the costs of competitors' product attributes.

3.7: Conclusion

Upon outlining the theoretical characteristics of specific techniques in the previous sections, this section is an attempt to synthesis the findings and the main aim here is to compare the theoretical influences of TMA with the theoretical influences of contemporary ideas of accounting for value creation, which is done through the means of the framework developed in the previous chapter. The importance of doing so is to draw out areas where there are similarities between both traditional and modern versions of management accounting.

Traditional forms of management accounting are largely influenced by NCE, particularly with regard to the development of costing techniques, and tools that are used for planning and control, and for decision making, where the guidance of theoretical constructs and conceptions from NCE were the most evident. Assumptions of rationality, abstraction, reductionism, stationary circumstances and the availability of perfect and free information permeated each of these areas in equal levels of influence, such that in the context of decision making, a manager (as decision maker) is assumed to be a rational agent motivated by maximising profits, which is done by considering only financial aspects of business decisions using perfect information that was gathered at no cost. Additionally, any decision that is made is assumed to be relevant for all scenarios because the social, political and historical contexts of the organisation are abstracted and decisions are made with no reference to uncertainty, such that techniques for decision making are not risk-adjusted in any manner.

To recapitulate; the main assumptions of neoclassical economics that are identified as structuring the development of traditional models are: rationality; abstraction where techniques are removed from external contexts; reductionism such that only some variables are included in the analysis; an unchanging business environment; constant real incomes; quality is ignored; perfect information is available; this information is available at no costs; and only determinate solutions can be found. Presented as part of the framework for evaluation these assumptions are used to examine the influence of NCE upon models for value creation.

The findings so far reveal that the theoretical characteristics of much modern and contemporary forms of management accounting are grounded in the assumptions of NCE. For instance, under each technique, constant real incomes were assumed and decision makers are expected to be rational and motivated by utility (or profit) maximisation. Consequently, despite the role of other disciplines in developing new forms of MA, such as marketing, psychology, consumer behaviour, and so on, marginalist framework from NCE still underpins and structures decision making models. In traditional management accounting, decision makers were assumed to seek solutions that maximised profit returns, and in the same way, contemporary forms of management accounting also have this explicit assumption. Theoretically, at least, customers are managed as part of a portfolio for maximising value to the firm, in the same way that employees are managed and utilised on projects such that their skills will provide financial value to the company. Similarly the theoretical characteristics of intellectual capital reporting and management indicate that IC resources should be measured and controlled on the basis of how valuable they are to the organisation, and decisions should be made with regard to any potential effect of firm value.

Chapter 4: Research Methodology

4.1: Introduction

The clarification of research methodology and the methods employed in the thesis is the overarching aim of this chapter, which will be achieved through a discussion of the epistemological, ontological and axiological attitudes taken in selecting the underlying critical realist research framework. The main frameworks or research perspectives available in both accounting business research are identified and discussed, with a particular emphasis upon perspectives of accounting change, and the selection of the research position of this thesis, critical realism, will be examined by reference to the nature and characteristics of management accounting.

Immediately succeeding the elaboration of the research position herein, consideration will be given to data collection, in order to demonstrate the appropriateness of the methods employed in both data collection and analysis under the critical realist framework adopted herein. Consequently, a discussion of the case study and interview methods employed in the thesis form part of this discussion on data collection methods.

Finally the chapter will evaluate the main limitations of the methodological framework used in this thesis, as well as detailing the ethical issues of this project.

4.2: Research Frameworks

Within accounting research, Laughlin (1995) remarks that methodological choice is an intrinsic part of the research process, and that researchers’ ought to explicitly address this choice alongside underlying issues as they relate to a researcher’s assumptions. This thesis adopts a critical realist position, developing a research framework for exploring accounting based on the ontological strata prevalent within CR as well as its explication of human agency in order to understand how social norms and rules are reproduced and created by individuals through their daily lived experiences.

Researchers in social science (Lincoln and Guba, 2000; Crotty, 1998; Bryman and Bell, 2003) discuss the principles of research design through notions of methodological frameworks where several elements compose and underlie an overall approach to conducting research. Such discussions highlight that the underlying methodological framework of any research project is linked to a set of assumptions about the world held by the researcher, which cumulatively informs and restricts the choice of an overall research framework. These inherent assumptions relate to views or beliefs that the researcher holds about the structure and composition of knowledge, the nature of reality and being, how their own values can influence the research design of any project, as well as many other possible areas such as justifying knowledge claims.

Each of these beliefs, in turn, limits the choice of an overall research framework for a project. To elaborate; Crotty (1998) presents the overall framework as a series of links between views held by the researcher and the goals or outcomes of the research project, whereby each link encapsulates the assumptions made by the researcher and can be seen to influence the assumptions held at the next level of the framework.

Taking epistemology and ontology as the starting points, Crotty argues that the researcher's views of knowledge production and their views on the nature of the world are linked and then limit the underlying research perspective that will be applied in the course of a research project. Upon choosing the research perspective, there are a number of several research methods that are immediately discounted, and so on. This general view of the research methodology process is shown in figure 4.1.

Similar frameworks have been proffered elsewhere (for example, see Lincoln and Guba, 2000), and despite slight differences between them, the most common elements are present in Crotty's (1998) model illustrated above. What is missing, however, from this model is axiology, relating to a researcher's views on values, beliefs and ethics, which is important to consider as an influence to research perspective as a researcher might understand how values and beliefs are reflected in the creation and maintenance of knowledge can then being to question the value of the knowledge that is produced by the research project. Indeed Laughlin (1995) emphasises that a researcher's prejudices, and by implication values, can equally affect methodological choice in the same way that beliefs about reality can.

It is with respect to the elements of epistemology, ontology and axiology that discussion is drawn to in the following sub sections.

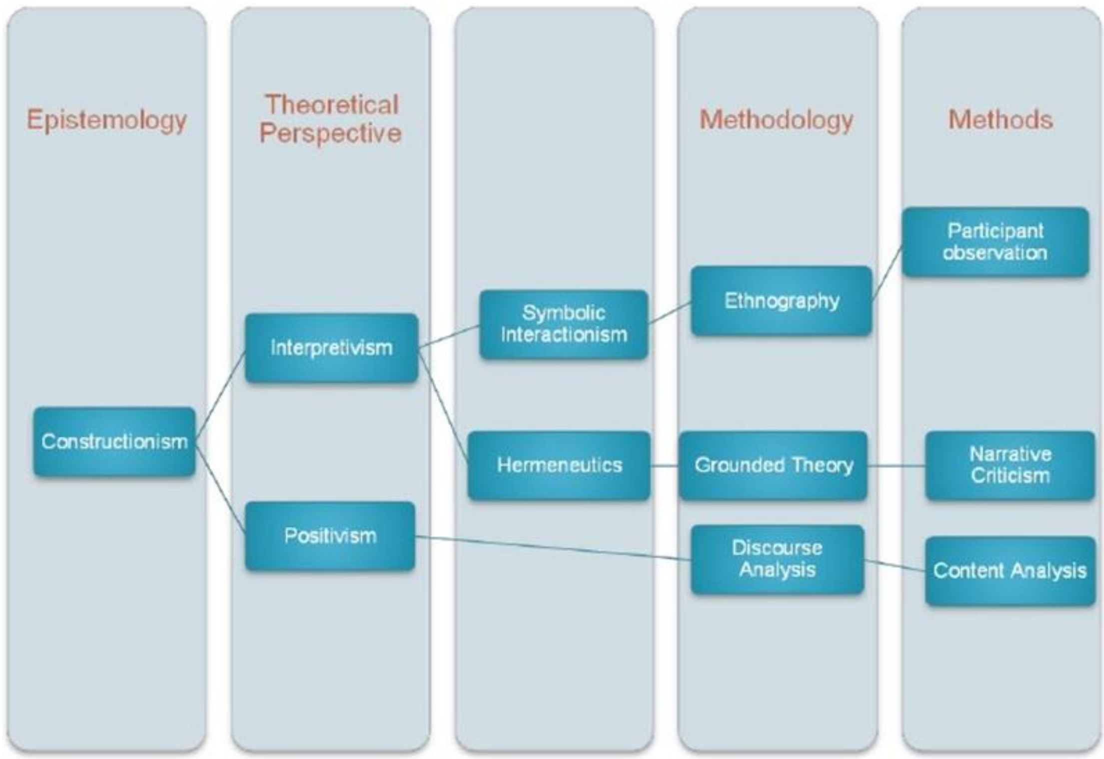

Figure 4.1: Research Framework (adapted from Crotty, 1998)

4.2.1: Epistemology

In a general sense, epistemology is a theory of knowledge, where the main concern is to detail how knowledge is gained and how truth claims are constructed and validated. Consequently, epistemology refers to a way of knowing and carries implicit assumptions about the researcher's position and behaviour in determining what constitutes knowledge and how such knowledge is constructed.

Several epistemologies exist, ranging from objectivism to subjectivism. The position of objectivism holds that knowledge is comprised of a series of objectively determined facts which arise from investigation that attempts to approximate the nature of the object under study. Subjectivism, also referred to as social constructionism, is often presented as an epistemological extreme that is in direct opposition to objectivism; whilst objectivism stresses the separation of researcher, research objects and knowledge, subjectivism asserts that this is not possible. By acknowledging that there is no independent or pre-existing reality, subjectivism advances knowledge as the constructed result of an interaction between the researcher and the objects of research. Consequently knowledge under a subjectivist position can occupy a series of ostensibly contradictory theories, but under an objectivist position, plurality cannot exist in the long-term, as accumulated facts portend to portray rationally determined representations of a single reality (*cf.* Bunge, 2004), which leads to a discussion of ontology.

4.2.2: Ontology

Refers to the set of commonly held assumptions about the way in which a researcher views the world and nature of reality. Ontology is, in essence, a theory of reality or being. In the philosophy of science, ontology is taken to mean a theory of being or existence, where key issues or arguments recount existential quandaries such as, "What is existence?" or "What can be alleged to exist?" (Crotty 1998). Such ontological questions are relevant for researchers as ontology reflects the researcher's beliefs about the nature of reality, and impacts upon how a researcher views the social phenomena under investigation (Guba and Lincoln, 1994). Given that ontology refers to how an individual views the world and concerns how they view reality it only makes sense that there are many different ontological positions that inform research. It is not practical to discuss each one in turn here, nor is it realistic to actually present a meaningful dialogue on every ontological position that has informed research. Thus, it would be prudent to devote attention to the various ontological positions that are dominant in the social sciences, and are discussed in both methodological and philosophy of science texts.

Naïve realism, more commonly associated with positivism (Lincoln and Guba, 2000), contends that reality is external to research and exists independently of any research, but also that it is apprehendable through scientific inquiry. This position is linked to realist ontology and naïve realism is often seen as a more extreme version of realism. Whilst realism is grounded in the assumption of the existence of an objective, external reality independent of human cognition (Modell, 2009), naïve realism reduces this position to the extent that scientific and social phenomena can be captured readily by research instruments or empirical observation, and that the real nature of the phenomenon under investigation is singular. Accordingly the position of both realism and naïve realism is linked to an empiricist epistemology, and often lends itself to a positivistic research approach (see, Gray, 2004).

The ontological contrary to naïve realism is that of constructivism, which maintains that meanings are held and generated by groups and individual human agents in "local and specific constructed realities" (Lincoln and Guba, 2000: 165). Consequently, social phenomena are products of these local and specific meanings. Under this position there are a diverse range of interpretations of the world and the existence of a particular phenomenon is related to a particular perception of reality which may be the case for some observers and not for others.

Nominalism, which unlike realism, stresses the unlikelihood of universals, and asserts the ambiguity of language. From a nominalist position, multiple realities are possible because nominalism stresses an ontological discontinuity between humans and other physical objects, where objects behave in the world, but humans experience the world (Laing, 1967). Resultantly experience is tantamount to the researcher's worldview, which, under nominalism, is an external reality shaped by the actions of human agents. As such multiple realities are possible and the position of universalism is refuted. Furthermore, owing to the ambiguity of language, an understanding of concepts is context-specific and stems from individual accounts that are shaped through subjective experiences. Consequently, knowledge derived by a researcher can only be determined by opening and maintaining a dialogue with researched individuals or research objects. Understandably this leans towards an anti-positivist stance of research with the emphasis placed upon knowledge being relative, and complements a subjectivist epistemology and research of an interpretivist nature.

4.2.3: Axiology

Axiology, identified Lincoln and Guba (2000) as a key assumption underpinning a researcher's worldview, theorises how values and ethics held by a researcher are implicated in the research design process. Whilst epistemology and ontology evaluate the underlying view of a researcher on the construction and validity of knowledge claims, axiology is specifically concerned with how the underlying value system of the researcher has influenced the choice of what is researched, and whether the values are explicit or have been left unstated. Stemming from the disciplines of ethics, aesthetics and pragmatism, axiology urges the researcher to consider the ultimate purpose of the research inquiry (*Ibid*). For instance, the idea that knowledge is the main goal of research and that its advancement is a value in itself is an axiological position; accordingly, knowledge and understanding is valued. Contrary to this, another position, such as critical theory, might claim that knowledge is not the main outcome of research, but a process of that research where the ultimate goal is to either use knowledge to engender positive change, such as emancipatory, for instance as stressed by Habermas and other critical theorists (*cf.* Laughlin, 1995). The former Aristotelian perspective is commonly aligned with positivistic approaches, while the latter might be seen to be anti-positivistic, or in sociological writing as anti-foundationalistic (*cf.* Burrell and Morgan, 1979).

Consequently, values in axiological thought are often presented as a set of extremes, with the positivist position at one end and the interpretivist position at the opposite end, which can be seen in figure 4.2 below:

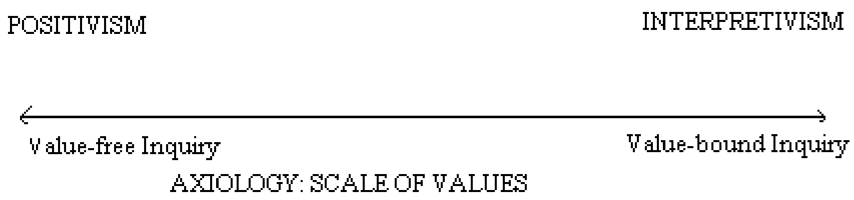

Figure 4.2: Axiology

Positivists, with an emphasis on objectivity and empiricism, assert that inquiry is value-free, that a researcher's beliefs have no part in the research process; but by stark contrast, interpretivists emphasise that values, a researcher's beliefs, must be at the heart of the research process, as these are central to the subjectivist approach of interpretation because values precede the search for description, explanation and theory (Cherryholmes, 1992). Positivist research stresses problem solving, and so research design values an end result. Other research approaches are presented somewhere in between these two extreme positions. Post-positivism, for example, stresses truth and reality as both being probabilistic, and de-emphasises the strict objectivity adhered to in positivist research. By doing so, post-positivists acknowledge that inquiry involves values, for example but that it is also possible to control the degree to which values influence interpretation and determination of results (Guba and Lincoln, 1994). Critical Theory, similar to the interpretivist position, places values as a central focus of research. The prominence of social conditions and injustice in Critical Theory research suggests an emancipatory axiology that, as above, might be used as the basis for potential positive social change, or a means of informing or transformation prevailing (hegemonic) discourse. Such an axiology invites elucidation of moral and ethical idealism to tackle cases of social injustice in accordance with moral or ethical principles that are upheld in the underpinning research design of a critical theory approach, for instance this might include a Marxist focus on labour, contrasted with Habermasian notions of open communication, engendering an open dialogue with research participants to overcome the status quo. These positions and elements are now discussed with reference to the main research perspectives available to a social science researcher.

4.3: Research Perspectives in Social Science Research

From the research design framework above, epistemological, ontological and axiological assumptions that underpin a research project or topic are brought together and collectively inform a particular school of thought in social science research. Each area represents a philosophical stance which underlies the chosen research methodology and it justifies why research has been conducted in such a way. Numerous perspectives or approaches exist, but in social science research the main ones available to a researcher are positivism, interpretivism, critical theory and postmodernity.

4.3.1: Positivism

The first research perspective to be discussed is positivism. The main aims of a positivist approach are to predict and provide an explanation for social phenomena, which is a position, mainly, associated with the traditional or hard sciences, but heavily influenced the social sciences between the 1930s and the 1960s (Gray, 2004).

Strongly characterised by a grounded assumption of an external reality which is apprehendable through scientific observation, positivism asserts that inquiry should therefore be based on scientific observation and be grounded in empirical modes of inquiry. Consequently, philosophical speculation is dissuaded as the social world is deemed to operate within a clearly defined set of laws which are discovered through empirical research.

Positivism places an emphasis on progress and presents scientific discovery, in addition to associated technological developments, as the driving force of progress being achieved. This stems from the conviction that scientific knowledge is both accurate and certain because it is set aside from beliefs and opinions. Scientific knowledge is thus deemed to be objective and consequently empirically verifiable, whilst subjective forms of knowledge gained through experiences, opinions and beliefs are not easily verifiable under positivism. Inherent in this is the emphasis in objectivism; positivism, vis-à-vis, scientific discovery, seeks to discover meaning which is intrinsically held in the objects of the research. Resultantly, as a research perspective, positivism is underpinned by epistemological objectivism - objects have meaning prior to and independent of the researcher's knowledge or consciousness of them.

Ontologically, positivism is characterised by either realist ontology or a naïve realist position (Guba and Lincoln, 2000) which stresses that for knowledge to be created about objects, that objects must objectively exist independent of the researcher's observations. Consequently measurement becomes important for positivism, as it is by means of measurement that reality can be rendered knowable. This position on measurement as a means of interpreting and apprehending the social world results in a privileging of quantification and a prioritisation to mathematics (and models) as an adequate means of analysing phenomena in the natural and social world (Mouly, 1978). Consequently, positivism further lends itself to quantitative rather than qualitative research.

4.3.2: Interpretivism

Presented as an extreme alternative to positivism, interpretivism places interpretation at the heart of research analysis. Under a positivistic approach, the researcher and the world have a direct relationship where the world is knowable and apprehendable, but through interpretivism, the researcher has no such direct relationship with objects of research; knowledge instead is ascertained through the researcher's interpretation of social phenomena.

And just as positivism has many variants, interpretivism, as a theoretical research framework can also be (re)categorised into various differing areas, including, but not limited to symbolic interactionism, phenomenology, and naturalistic inquiry.

Taking symbolic interactionism as an example, this approach grew out of a group of researchers who desired to develop a deeper understanding of human behaviour and how it was shaped and influenced by everyday social practices and their experiences than was available under contemporary approaches in the 1930s (Gray, 2004). As a research approach, it takes meaning and human action as the central focal point and espouses that meanings are not general and fixed, but that they become altered through experience. Essential to this is the notion that meanings arise out of social interaction (Crotty, 1998; Gray, 2004) and that interactions can alter them. In order to research such changes in meaning, researchers study social phenomena from the perspective of individuals or researched subjects. This entails field study and participant observation, as well as forms of ethnographic research.

Phenomenology on the other hand, can be observed as a social research method in varied fields as sociology, psychology, nursing, and education and social work. Primarily concerned with the experiences of participants, phenomenology provides an opportunity for a researcher to examine structures of experiences and consciousness, and thus it privileges a discussion of ontology, in particular phenomenological research examines how the world appears to others, which is corroborated through an interrogation of the participant's experiences and subjective interpretations of a given social phenomenon. To be blunt (so as to neglect coverage of some complex issues) phenomenology then is the study of how things are presented to us (Crotty, 1998).

Finally naturalistic inquiry, and later constructivist inquiry (Lincoln and Guba, 2000) holds that there are multiple realities which are constructed and can only be researched on an holistic basis (*Ibid*). As a further example of interpretivist research, the focus is placed on social interaction and behaviour, but the key issue to naturalistic inquiry is a prominent lean on a naturalistic ontology which determines how research is conducted. Similar to other interpretivist approaches, the ontological position stresses that reality is constructed and subjectively understood, yet naturalistic ontology urges that realities are also multiple and cannot be understood in isolation from the contexts in which they arise (*Ibid*). As social phenomena cannot be detached from their context(s) the main challenge to the researcher is to develop knowledge based on individual cases (Gray, 2004). Research designs cannot fully be developed before a naturalistic inquiry, as the grounding in multiple realities makes the development of research mechanisms problematic; instead an emphasis is placed on the emergence or unrolling of research instruments once inquiry has begun (Lincoln and Guba, 2000). Given that the focus is on behaviour and human or social interaction, some research instruments favoured in naturalistic inquiry include interviews and participant observation (Gray, 2004).

From the elaborations provided on interpretivist approaches, it becomes clear why positivism is often presented in polar opposition to interpretivism, as positivism argues for the existence of an immediate and knowable reality which is directly available to the researcher and produces knowledge based in facts and laws. This nomological emphasis is a common dissonance to the stress placed on social phenomena by interpretivism. Meanings in a framework of symbolic interactionism, for example, are not fixed and are continually revised through human interaction, whilst positivism ascribes a methodical approach to understanding facts, interpretivism stresses process of meaning-making.

Regarding epistemology, interpretivism affirms a position of constructivism, as observable facts may be illusory, and phenomena, that cannot be observed or rendered by measurement, can still exist out with their capture by research. Ontologically, interpretivism is rooted in the concept of the life-world (Crotty, 1998), where perceptions about the world are inexorably attached to experiences. Interpretivism views the researcher as inseparable from reality and in addition, the notion of the life-world which lies central to interpretivist ontology contains both subjective and objective elements. Firstly the subjective characteristics reflect the perceptions held about the meaning of the social world, which is socially constructed. Secondly, objective characteristics reveal a process of continuous change to the meanings which are shaped by interactions with others. Consequently the ontological position conforms to relativism, where realities are both local and specifically constructed. Furthermore in some examples of interpretive research and approaches, realities can also be multiple and holistically assessed. In contrast to positivism which holds that research is objective and hence value-free, interpretivism views science and inquiry as being driven by human interests.

4.3.3: Critical Theory

Modes of critical inquiry also stress this axiological position that science is value-laden, and that the pursuit of knowledge is mediated by social and power relations, such that certain groups within society hold privileges over others and the facts determined through research are representative of the interests of such dominant groups.

Critical Theory has links with the Frankfurt school. Stemming from a wider dissatisfaction over the developments of Marxist theory, a group of European scholars in 1920s are collectively responsible for conceptualising the beginnings of critical theory. Arguably Habermas' (1970) writings on critical social science and how that has evolved can be linked to discussions of what might be considered as critical theory today, i.e. that whilst the emphasis of economics and sociology, for example, is on producing nomological knowledge (Habermas, 1972), critical social science is concerned with determining instances when knowledge and theoretical statements promote current social arrangements which intermingle with social interests and subsequently constrain and marginalise groups or individuals. By distinguishing and being cognizant of how prevailing social conditions are perpetuated, critical science scholars are then able to go beyond other perspectives and sciences and to engage in self-reflection of “an emancipatory cognitive interest” (Habermas, 1972: 310) to promote a stance against the status quo. Consequently, the goals of critical social science as envisaged by Habermas are to highlight conditions of social injustice and to seek ways to improve or transform such conditions.

Critical Theory is also committed to challenging social conditions and providing alternatives to existing arrangements. It is quite difficult to elaborate both the epistemological and ontological groundings of critical theory, as the positions of both vary from publication to publication. For example, early critical theorists place an emphasis upon epistemologies influence by historical materialism, while Habermas (1972) stressed that hermeneutics informed knowledge in critical theory. Epistemologically, then, CT has a widespread grounding. As a research methodology, CT highlights ideology and power struggles embedded in objects, and consequently rejects objectivism.

The purpose of knowledge on CT is to expose domination. A more normative emphasis of CT urges emancipatory action. Epistemology of human interests for Habermas (1972) has three types of knowledge. The first is empirical-analytic, which has a technical and instrumental interest in determining causal explanation, and refers more to how human actions can be oppressed through technical and practical interests. Secondly, historical-hermeneutic has a practical emphasis on understanding, usually with reference to language and can be associated with the repressive functioning of communication or speech acts. Finally, critically-oriented science with the leanings towards emancipation seeks reflection on power interests and exposing which suitable circumstances might provide avenues of emancipation from oppression. Ultimately these three forms of knowledge are reflected in the epistemological stance of CT, so the underlying views of knowledge in CT can be extended to include a mix of social constructionism, hermeneutics and constructivism.

Regarding ontology, the position of CT is, again, somewhat hybridised. Guba and Lincoln (2000) placed historical realism at the centre of CT's ontology, whilst Gray (2004) cites social constructionism as the dominant ontology of CT. Generally, within CT, concepts are regarded as being socially constructed, in that technical concepts and cognitive actions or interests determine objects of reality, so CT leans towards interpretivism. To expound; theoretical statements and facts do not describe phenomena or reality, but instead depend upon assumptions ascribed to theoretical constructs, and such assumptions do not exist independently of the researcher. The known and the knower cannot be separated. Furthermore, owing to the emphasis on exposing domination and, in cases, seeking liberation, there is often a normative tone on how social structures and the social world *should* be, implying an element of epistemological and ontological idealism.

4.3.4: Post- Considerations

Leading on from this are post- perspectives. Philosophy texts can often refer to postmodernism and postmodernity often in conjunction or interchangeably as a term, posing some difficulty in reconciling the usage of the terms. Despite subtle differences between both, those with postmodernist leanings characterise the school as a social period which signals the end of modernity, and is often characterised by the distrust of metanarratives (Lyotard, 1979). That is to write, that the grand theories and knowledge as sought after through modernity and enlightenment are tantamount to knowledge as/with a purpose (*Ibid.*), and such a link to the creation of knowledge represents renewed commitment to enlightenment and other prevailing metanarratives. Lyotard (1979) mention this nomological drive under modernity in connection to the speculative grand narrative. In addition to postmodernist enquiry, poststructuarlism is also used to refer to similar concerns and as a philosophical approach is in diametric opposition to the modes of structuralism. Given that structuralist movements portray structures within society as external to and outside of the control of an individual; these structures also shape experiences and meanings. Post-concerns transcend oft held criticisms of the approach explicitly focusing upon on the concept of "selfhood" and linguistic deconstruction or the destabilisation of meanings, as captured through the impetus of Foucault and Derrida respectively, and a key task of research is to consider how the social world is (re)presented and conditions under which meanings are (re)produced. Whilst structuralism and modernity divide the control and experience of social phenomena from the self, postmodernists and poststructuralists argue that such boundaries are dissolving.

Epistemologically, postmodernism does not adhere to any one specific aspect or position of knowledge. Accordingly, texts and social actions are imbued with interests and values, and notions of independent and objective knowledge and value-free facts are abandoned. This opposition to a modernist epistemology and generally epistemological empiricism is further reflected in the focus on a ‘becoming’ ontology (Gray, 2004) through which reality is composed of continuous processes of flux and transformation and thus social phenomena cannot be captured using static terminology of measurement (Chia, 1995). However, Fleeetwood (2005) asserts that postmodern positions demonstrate social constructivist ontology and an explicit rejection of anti-realism. In summation, it would be fair to assert that the postmodern moment is punctuated by an epistemological uncertainty and an ontological plurality. Explicitly, universal conceptions of epistemology and ontology are replaced by a series of local conceptions.

Axiomatically postmodernity further distances itself from modernism by rejecting the axiom that scientific inquiry is value-free and generalisable; instead axioms that scientific inquiry is value-bound and can only ever be time-specific and contextual are stressed. Consequently, postmodernity de-emphasises progress through the divergence of knowledge and purpose. Research is an exercise in exposing values and interests that are embedded within social actions, practices and texts.

4.4: Critical Realism

Stemming from Bhaskar’s (1978) early writings in *Realist Theory of Science*, critical realism has emerged as both a self-contained philosophy (Losch, 2009), and as a methodological framework (Ackroyd and Fleetwood, 2000). The term itself is representative of an amalgamation of terminology which appeared in Bhaskar (1978): transcendental realism, taken to refer to a denial of truth claims held or asserted on the nature of cause and effect present in scientific experimentalism, and critical naturalism which was advanced as a means to position human sciences away from the assumptions and goals of positivist science and to re-orient the pursuit of knowledge as a means to provide both a deeper level of explanation and human emancipation. Critical realism has subsequently emerged as a hybridised philosophy encompassing both transcendental and naturalist claims (see Bhaskar, 1989: 105). A unique focus of CR is its treatment of ontology.

4.4.1: Critical Realism and Ontological Stratification

One of the main features of a critical realist position is that of an ontological stratification. As noted by some authors (Ackroyd and Fleetwood, 2000; Wad, 2001), through CR the world is split into a domain of the 'real' that consists of mechanisms, experiences, events structures and mechanisms, a domain of the 'actual' where experiences, events and actions occur, and a domain of the 'empirical' composed solely of experiences and perceptions. Simply put, this stratification is based on the idea that there exists a social reality composed of real structures that exist and act independently of the pattern of events they generate (Reed, 1998) and of our empirical observations.

Turning to each of these domains, the Domain of the Empirical is seen to be the realm of experiences of research subjects and organisational participants. In this domain such experiences pertain to what is immediately apprehendable by participants and is compounded with events in the Domain of the Actual, where the importance is shifted to events, whether observed or not. Such events can happen independently of experiences and research subjects' perceptions of them, and they are only transferred into the domain of the empirical when these background events are transformed by human agency into experiences (Bhaskar, 1978), and once organisational participants can correctly identify them as experiences (Leca and Naccache, 2006).

The Domain of the Real captures structures and causal powers that lie beyond the surface of reality as expressed in the domain of the actual. It is here where potentiality is enacted, and any background events that do not transform into experiences are representative of phenomena that is observable within this domain.

These three levels of reality provide a very specific and stratified view of ontology, and give to CR a unique ontological profundity (see figure 4.3 below).

	Domain of real	Domain of actual	Domain of empirical
Structures	V		
Events	V	V	
Experiences	V	V	V

Figure 4.3: Ontological Strata, Source: Bhaskar (1978: 13)

Stemming from this ontological depth and from the interplay between each of these domains is a consideration that one of the main strengths of CR is that explanation involves going beyond the immediately available level of social reality and piercing the various levels that exist within the domain of the real, in order to identify structures and causal powers and the ways in which they act as well as how they generate and transform events into experiences (Sayer, 2000; Leca and Naccache, 2006). For Bhaskar (1978) mechanisms, events and experiences were constitutive of each domain, separately, but overlapped in what we understand as reality. Figure 4.3 can be seen in a relational sense below in figure 4.4, which highlights a certain inclusivity of the strata, in that experiences associated with the empirical domain are a compartment of the actual which in turn contains events, and these are a subset of the real.

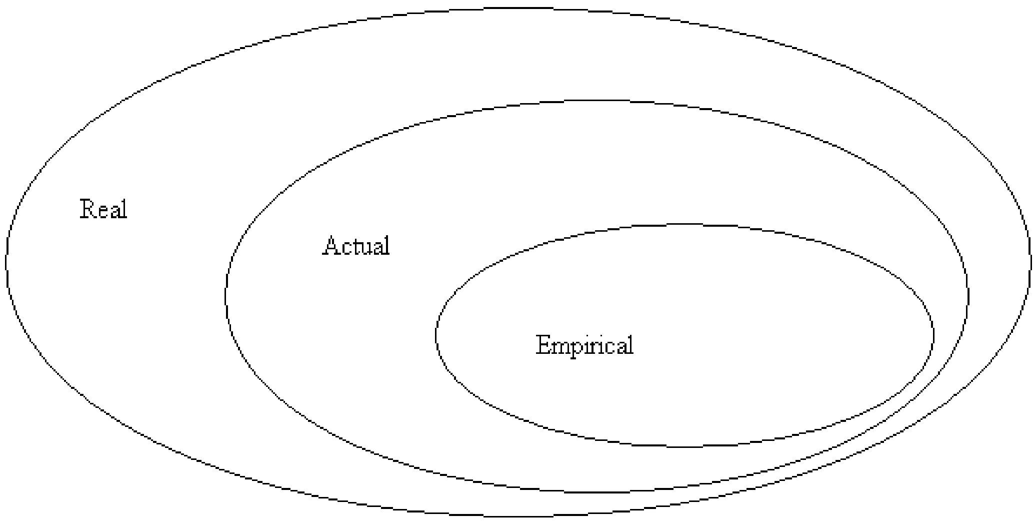

Figure 4.4: Model of ontological strata

As a result of this ontological stratification and multi-level reality, knowledge exists in both a transitive and intransitive state. Firstly, knowledge is seen to be transitive in that it can only be apprehended through the use of mechanisms in evaluating the domain of the empirical and such mechanisms can only ever partly capture knowledge. Furthermore, knowledge is the enduring result of the interplay between these domains and the intransitive generative structures that are also implicated in CR's view of causality (as noted below). Without the terminology of CR, social science and philosophy has posited elsewhere similar notions of a transitive knowledge.

Critical realist framework allows change to be traced through the organisation as the result of examining changes in organisational routines through the triple stratified ontology, which distinguishes layers of causality and presents structural drivers of change which are experienced by organisational participants in the domain of experience as different to background mechanisms which can be existing preconditions of change but do not actually impact upon the organisational routines of employees - hence these background events do not enter into the domain of experience and are largely confined to the domain of the real and/or actual.

Conceptualising management accounting practices as organisational routines is not new and has been urged recently by researchers (Johansson and Siverbo, 2009). In the empirical case studies in this thesis, practices are presented as organisational routines in which new or emergent routines can be observed as driven by the accounting change resulting from the adoption of value creating measures. Otley (1999) refers implicitly to embedded organisational routines as enduring features of management accounting practices, and so a careful examination of emergent routines as distinct from embedded features allows the effects of change to be traced from the domain of the real into the domain of the empirical by interviewing organisational participants and urging a reflection on how their routines have been affected by implementation of new techniques.

Owing to the critical realist belief that a reality exists independently of research and knowledge of it, knowledge is deemed to be fallible, in that research can only ever capture knowledge of a specific event occurring at a specific time and place, operating, for want of a better metaphor, as a camera does when capturing a snapshot of events. Given this inevitable fallibility and changeability of knowledge, an underlying critical realist framework suits this research project, as the central theme is to examine an aspect and related techniques of the ever-changing MA, where knowledge and practices are continually reconstructed.

Furthermore, given the transience of knowledge, contextuality is highlighted wherein critical realists recognise that knowledge is relative to the context in which it was produced. Change is contextual and any knowledge of change is going to be contextual too.

4.5: Methodologies of Accounting Change

The mainstream or traditional view within MA literature claims practices and techniques diffuse in a static manner through a process in which practices are unchanged and remain uniform in the practical context. However this position has been debated (Otley, 1994; Scapens, 1994; Ax and Bjørnenak, 2007), with authors asserting that MA practices and techniques do not contain fixed and definitive components, but they contain a high degree of conceptual ambiguity and are generally open to interpretation (*cf.* Benders and van Veen, 2001) allowing practitioners to select elements which are either more appealing to them or that are suitable for their purposes (*Ibid*). Gallhofer and Haslam (1991) hypothesised that accounting is a:

"[M]utable phenomenon, which interrelates with the broader socio-political and economic context in which it operates" (487).

This idea suggests that, in the context of MA, techniques interrelate with the context in which they operate, and that MA is fluid and not a static process. Owing to this fluidity, MA is open to a continual process of practical (re)construction according to the context in which it operates. Consequently, as Gallhofer and Haslam (1991) also demonstrated, it is possible to change accounting by interacting with its context. This issue of contextuality has already been highlighted as important (see Otley, 1994; and Puxty, 1993), and any examination of management accounting practices could thus consider the interactions between accounting and various contexts.

Innovations, such as management accounting novelties, can be conceptualised as a process of production whereby techniques are co-produced (Armstrong, 2002; Jones and Dugdale, 2002) and has effects on the organisation, existing management control system (Chenhall and Langfield-Smith, 2007) and employees (Armstrong, 2002; Puxty, 1993). Hence VCMA, viewed in this way, is a mechanism of change – by locating VCMA in the organisation it can produce effects that impact upon organisational functioning, which would be experiences by a range of organisational participants through alterations in daily work routines. However, their experiences of VCMA may be delimited to a narrow range of events caused by adoption. In the terminology of CR, a change in the daily work routines and practices will be dependent upon the extent to which generative mechanisms, such as changing measurement bases and adoption of VCMA, have filtered through to the domain of the empirical.

In a sense causation is related to the interrelations between mechanisms and structure. Whilst some effects of adoption and measurement are immediately noticeable as empirical events, some effects may not be and these effects thereby lie outside the empirical domain. Such background events may still produce a contextual change but are rendered to the domain of the real. By interacting with its context, accounting is altered (*cf.* Gallhofer and Haslam, 1991), but such alterations and change only moves to the empirical domain when organisational participants become aware of their effects. Causality, then, is embedded partly in agency and structure, such that accountants and other employees can replicate political and social effects of change unconsciously, and because their social world is defined in terms of perception, reflection and their actions, organisational change defined by CR might not be readily apparent or noticeable.

To expound; owing to the transitivity of knowledge and intransitivity of the real world (Bhaskar, 1978), actors' perceptions and understanding of the world are concept-dependent (Wad, 2001) and theory-laden (Ackroyd and Fleetwood, 2000) and will never fit completely with the real world (Bhaskar, 1978, Wad, 2001, Leca and Naccache, 2006). In these instances, some experiences can be understood as events produced by 'hidden' mechanisms – such background events can be identified as social mechanisms, rather than as generative mechanisms of change. In such cases, this can be interpreted as changes in the social or political context of management accounting and such events are located within the domain of the real, remaining as unperceived background events and mechanisms.

4.6: Research design

The CR framework allows an explicit focus on change. Whilst positivist methods analyse change within the confines of a rigid set of a prior assumptions codified as contingencies, the CR framework has a more fluid notion of change. For Lawson (1999) the dominance of positivist methodology within research stems from the perception and treatment of ontology (or in Lawson's accusations the non-treatment of ontology) as subservient to epistemology resulting in research which presupposes the nature of the social world. Fleetwood (2005) claims this is due to the positivist application of deductive reasoning, similar to Bhaskar's (1989) critique of science, in that atomistic determinism reduces experiences and complex phenomena to a set of regularities and natural laws from which propositions can be made and hence knowledge can be created and accumulated. Unlike this position, a CR framework avoids atomism and favours an understanding of causal mechanisms that drive phenomena, and encourages researcher reflection on the (inter-)relationships between structures and agents. Positivism treats relations as a series of contingent factors, and interpretivism broadens this beyond external foci and introduces notions of causality, which in accounting research can be linked to include work.

The conceptualisation of work as a series of organisational rules and routines is present within Burns and Scapens (2000) study of accounting change. Burns and Scapens' (2000) study is developed on an institutional framework and contains numerous references to an underlying interpretive approach to the study of accounting change. For instance, in their model, isomorphism is grounded in the tenets of social constructionism, which was developed by Burns and Scapens to highlight the role of agency within institutional theory. Their model advances a conceptualisation of change that is rooted in an examination of processes and routines, such that practices of management accounting represent routinised human activities, which are subject to organisational control systems which provide stable routines and rules of organisational practice. Rules, in this framework, refer to formal characteristics of management accounting systems, and routines are constitutive of practices which are actually adopted as practice within organisations. Institutionalism, as it relates to organisational and accounting studies, has been developed from perceived 'old' institutional theory and is linked heavily to sociology and institutional economics, where its application in the field of management accounting has been utilised to analyse how organisations reflect institutional changes and how practices, routines and rules are also institutionalised within organisations.

For Burns and Scapens, both organisational routines and institutional actors become agents of change, an approach which embraces notions of Giddens' structuration theory, which considers social practices across space and time. Crucially, the theory hinges on the interface between agency and structures, as for Giddens (1984) the repetition of acts by agents reproduce structures over space and time because the actions of individuals are informed by their knowledge of society, and since society reproduces structures in the form of societal values and norms, action is conducted through dominant societal rules and is, invariably, constrained by structures. In short, agency is limited by, and performed within, pre-existing social structures and can, to an extent, be predicated owing to the ontological security that agents have in social structures.

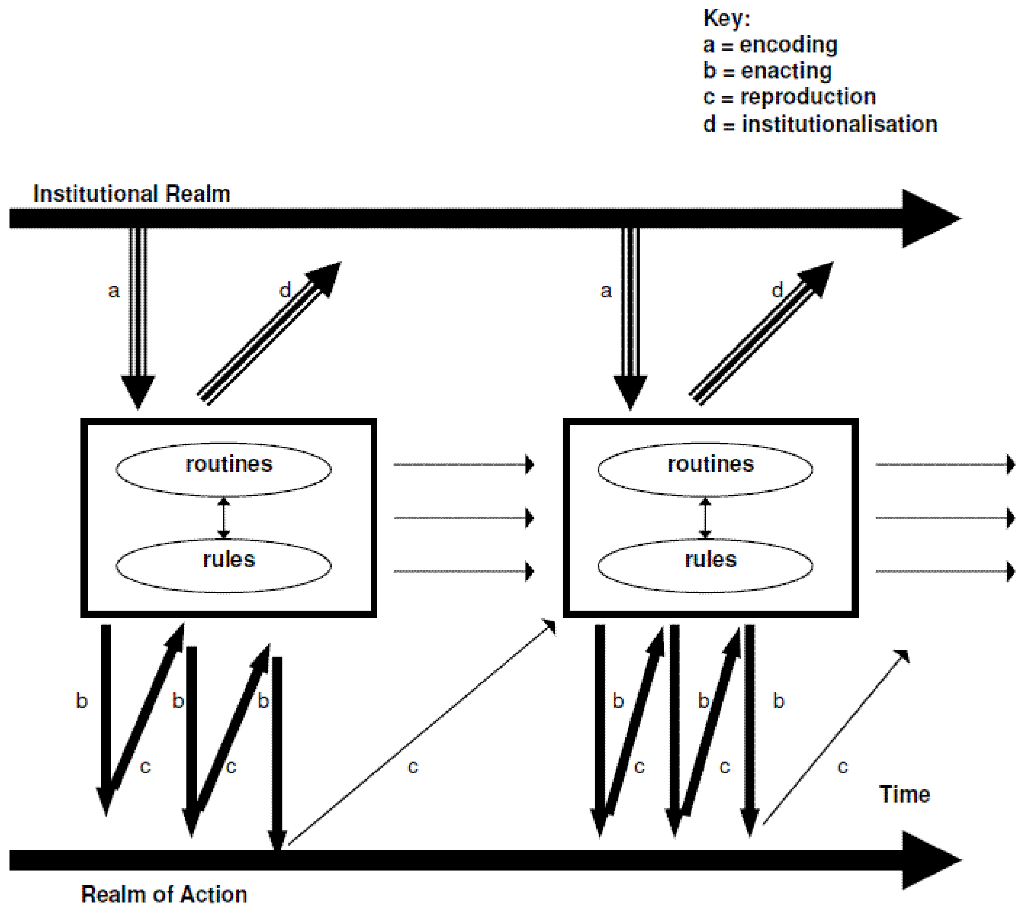

Figure 4.5 Process of institutionalisation (Burns and Scapens, 2000:9)

Their approach is shown in figure 4.5 above. By conceptualising institutionalisation as a series of interactions over time between "Institutional Realm" and "Realm of Action", rules and routines reflect particular organisational and institutional actions and pressures that are prevalent at any given time; furthermore, these actions and pressures exert an aggregate influence upon rules and routines over time. These interactions occur between points a, b, c and d in totality throughout the model, where points a and b refer to institution actions and document how institutional principles are reflected in rules and routines in a given contextual setting, whilst points c and d symbolise the extent to which institutionalisation of behaviour is reflected in adopted rules and routines that inform action over time - in other words, these arrows show how behaviour and interaction is modified through pressures of institutionalisation.

Explicit in this approach to change is a clear concession given to the role of structure in driving change, in that agents are to an extent governed by institutions and external pressures to modify behaviour according to dominant institutional relations at a particular time. Whilst the approach embraces both notions of structure and agency, the final construction of accounting change is driven by what agents perceive (and hence replicate) as being institutionally dominant relations at a given time. This concedes primacy to processual notions of change, which emerges as problematic in the wider context of constructing accounting as a social practice.

Dillard *et al.* (2004) elaborate on this criticism by recognising that the model has limitations in addressing economic, political and societal issues that are compelling in delineating organisational context(s). Further, the role of conflict between the interests of organisational actors and institutional arrangements/pressures is neglected in Burns and Scapens framework. Those who might become marginalised as a result of changing or existing institutional rules or routines might engage in political struggles or resistance to arrangements, and thus potential drive change within organisations. Here the potential role of conflict as informing or mediating change through resistance is neglected. The political context of the organisation and employee interests might serve as an arena through which challenges to prevailing rules and routines are presented, but this is not captured through Burns and Scapens model.

Whilst these aspects are missing, the presence of work within interpretivist accounting research suggests that a focus on work would be worthwhile. To be sure, critical realists have also theorised the placement of work within research frameworks. The few examples of critical realist case studies have also focused on work as an area of empirical examination.

Viewed in this light, work is advanced as a set of activities. To be more succinct, work is representative of organisational routines that comprise a set of relations that are not objectively real; they are “symbolic representations through which meanings and social interests are constructed, mediated and deployed” (Grint, 1998:8), allowing for individual organisational participants experiences to be examined within the context of VCMA adoption: how these experiences have changed could be conceptually indicative of how meanings and social interests have been deployed under VCMA. An interpretive framework also treats work as a set of routines, as noted above. However Burns and Scapens (2000) seminal study as understood through Archer's (2009) concerns would constrain the agency component of work as a set of meanings and representations mediated by structures. Reflection for Archer (2009) upon constructed meanings occurs through the individual, but the meanings are shaped by structural events and interactions to such an extent that agency is itself structurally mediated. Work and routines can therefore, for an interpretivist approach, be critiqued on the basis that all causal mechanisms are structural, and that human action is never fully understood and remains as a background event: that is, some aspects of agency will contribute to organisational change, but that these are themselves not important enough to be noticed by organisational participants and therefore remain as background to causal explanation.

The focus on accounting and organisational change is taken in this thesis along different routes. Firstly, through critical realism, it is crucial to understand the causal factors and generative mechanisms that lead from a previous state to the current state; consequently an examination of accounting and organisational history is important. Causal mechanisms explain the underlying cause of observed events. This extends beyond positivism, which is constrained largely to empirical events, through a consideration of three domains in which underlying factors and causes can be understood. Positivism isolates components of social systems and examines them under controlled conditions, however, CR hold that multiple components influence events, and such a CR research should rely upon abstraction and conceptualisation (Sayer, 2000). Fleetwood (2005) notes that conceptualisation can occur across all three levels of reality present within CR, such that under a CR approach research reflection upon both contexts might be necessary in order to explore how these contextual accounts of social phenomena might relate to a more universal context of VCMA.

Broadly conceived, these features of CR can be highlighted in table 4.1.

Area of focus	Purpose	Research focus	Data
Pre-change/ organisational history	Uncover the history of the organisation, and to understand the development of VC practices within the organisation. To understand the contextual factors and premises which underpin the rationale for VCMA adoption	What is the practical nature of VCMA; How are they adopted; On what beliefs and values are they introduced within organisation	Company documents Semi-structured interviews with senior-level participants (those with experience pre-adoption; those who make strategic decisions)
Context: Case company	Investigation of generative mechanisms which influence VCMA in practice and how this might link to a deeper understanding of the abstract/theoretical context of VCMA	To understand institutional/environmental reasons for adoption; alongside this, an investigation into influences of implementation of new techniques, and how these might relate to theoretical reasons/debates. Cross-case analysis will occur at the end of both empirical data collection periods to conceptually reflect upon individual organisations and how these contexts might relate to a wider context	Company documents Semi-structured interviews with senior-level participants

Setting: Experiences	To examine the organisational practices and daily working routines within the case organisations, and to determine the rationale for shifts in these routines over time;	Which techniques have been adopted by the organisation, and the reasoning behind implementation; Patterns of introduction; How these differ from old(er) techniques and old(er) work practices in the organisation	Semi-structured interviews: mutli-layered Reflection on experiences and work routines of organisations participants
Setting: Organisational relations	To uncover levels of change upon social relations within the organisation - to what extent have relations and participation been mediated by shifts in measurement techniques	Which aspects of human behaviour are produced under instances of change; how does (if at all) this affect organisational relations; Are any contradictory logics exposed? How does this relate to relations and behaviours under older systems and work practices/routines.	Company documents Semi-structured interviews with participants at all levels of the organisation. Senior-level allows focus on logic of adoption to be discussed; “lower”-level allows for shifts in relations and systems to be exposed; From this contradictions might arise

Table 4.1: Features of a Critical Realist framework

This framework avoids the perceived flaws within positivist approaches as there is a deliberate attempt to avoid an atomistic approach to understanding the phenomenon of accounting change, and instead a more holistic view is taken which compartmentalises case organisations into different elements which allow specific questions to be posed at different levels of organisational functioning. In so doing, the dynamics of change could be exposed in scrutinising causal mechanisms that drive VCMA within the organisation, and also provides a space for conceptual reflection on the (changed) nature of social relations between different agents and structures within each context. A positivist account, here, would rigidly stay within an objectivist ontology that holds, in a monist sense, that observations can be reduced to one reality, which would ignore the socially constructed elements of reality which, per Fleetwood (2005), may not be reducible to either observation or discourse but that are conceptually mediated and dependent on agent's behaviour and perception of organisational reality.

By comparison to an interpretive framework, a social constructionist position holds that organisational practices are created and defined by agents. CR takes a more direct stance, noting that particular elements are determined by structural interactions, that actions are constructed by the social world. To clarify, an interpretive framework focuses upon symbolic representations where, within accounting and organisational studies, collapses structure and agency into a singular structural concern (*cf.* Archer, 2009), or by viewing social practices as completely constructed by agents' accounts of social reality. However, CR provides extra space for reflection upon background events - in that there are particular structural events and human behaviours that directly impact upon change, but that are seen by Fleetwood (2005) as non-empty extra discursive spaces, which are ignored by both positivist and interpretivist approaches. Such spaces are deemed to be the sole influence of structural interaction, under interpretivist research, in that these are said to be mediated by the social world and structural relations. CR thus studies structure as an independent area, but also recognises that agency can be affected by ideology, which is neglected under interpretivist approaches. For instance, CR recognises that unequal power relations can be reproduced through social practices and that an agent's conception of organisational practices can be reconstructed to include this ideological component. The CR framework, on this concern, has the potentiality to mesh with critical theory and postmodern perspectives, in that the inherent emancipatory spotlight of critical theory could be enhanced through an ontological stratification that explicitly considers how organisational practices establish and maintain unequal power relationships. Indeed Fleetwood (2005) links CR developments with examples from a Marxist orientation, aligning wage labour and power in his discussions of how CR can possibly contribute to organisational studies. Reed (2000) also notes similar concerns with links to discourse and embedded power relations, highlighting that discourses become generative mechanisms of structures and the discursive formation of practices can also generate relations of power. Bhaskar (1986) links critical realism with the possibility of emancipation (which I return to in chapter 8), and suggests that an underlying focus on Marx could contribute to an understanding of the power relations that might be embedded within generative mechanisms. This suggests that critical realism could benefit a critical theory approach. Fleetwood (2005) also notes that critical realism could be useful to postmodern researchers, in that the wider focus upon activity and socially constructing entities can be paired providing postmodern researchers can adapt from a conventional anti-realist ontology to the triple ontological strata specified by critical realism.

As noted within the literature, critical realism can be interpreted as a middle position between the extremes of empirical positivism and anti-naturalist interpretivism, and such an interpretation is proffered by Bisman (2010) who attempts to develop a post-positivist methodology for accounting based on critical realism as a middle position, situating critical realist methods as between the extremes of scientific and explanatory positivism, and the naturalistic and exploratory interpretivism. In addition, critical realism can be augmented through triangulation in that pursuing a qualitative project grounded in the assumptions of critical realism as the neutral-theorising can be paired upon reflection with other forms of research (either quantitative and nomothetic, or qualitative and ideographic) to advance deeper understanding of accounting phenomena (*Ibid.*) through the paradigmatic straddling of critical realism. The main area of potential advancement, theorises Bisman (2010), is on understanding the economics, regulatory, social and political effects and uses of accounting.

However, this is not the first attempt to introduce middle ground methodologies and philosophy within accounting. Richard Laughlin in a series of publications has attempted to stimulate a Habermasian research programme based on a middle ground position. Underpinned by Habermas' writings on communication and theories of communicative action and discourse ethics, Laughlin offers a model of reflective social action for decision making. Deeply entrenched in Habermas' critique of instrumental reason, Laughlin's (1987; 1995) attempts to investigate accounting phenomena using language and communication as a sphere of accounting development, where shifts in accounting practice and theory are developed around concerns of power relations and the potential for emancipation. His framework (1987) concerns how the life-world of an organisation has become colonised by cultural and social factors to the extent that possible constraints are placed upon organisational functioning. Specifically, changes in the technical accounting systems bring about such factors and inhibits functioning, and can eventually alter the strategic steer of the organisation. For Laughlin (1987) researcher awareness of this colonisation can lead the researcher to a more effective analysis of the change process. Explicit here is also a focus on the emancipatory potential of knowledge, in that knowing how change occurs, can yield insights in how discursive processes can constrain organisational participants and thus by devoting time to formulating critical strategies, emancipatory mechanisms can be devised.

This informs Laughlin's (1995) formulation of a middle range thinking into a critical based research stream, where the level of proposed social and political change from the status quo takes a middle position. To that end, MRT emphasises a readiness to change, but that some aspects of the status quo will remain, accepting that fully achieving change is unlikely, and that progress is based upon Habermasian notions of reaching a mutual consensus, such that change is mutually constituted between parties with opposing views. Laughlin's position on MRT is representative of some attempt to reconcile the tensions between critical research and interpretive positions (*cf.* Baker and Bettner, 1997) particularly as critical positions has a willingness to embrace social and political change, whilst interpretivist positions are more neutral towards change.

Positivism and post-positivism rely on naïve, or direct, realism and place a large emphasis on reliability, validity, prediction, control and take a building block approach to knowledge (Lincoln and Guba, 2000). MA in a practical sense is characterised by a shifting set of purposes; as Puxty (1993) noted, MA has many different conceptions and it would be naïve to assume only one purpose of MA for this investigation, as the point is to debate notions of change in both practical and theoretical realms. By taking a direct realist position, MA would essentially be what I, as researcher, decide it to be, which might conflict with the perceptions held by organisational participants. Thus, a potential conflict between ideas arises, and no clear consensus on what MA is practice would be gained, as I, as a researcher, would heavily bias the research with my perceived notion of what MA is. In this sense, positivism would not be a suitable perspective with which to ground this research project upon, as research and accounting concepts would be value-laden. Continuing this point, positivist and mainstream research on MA change, as noted above, considers that accounting change is a technical phenomenon that is driven by gains in efficiencies and organisational needs, furthermore that accounting change is necessary for the technical betterment of accounting systems (see Loft, 1995; Gallhofer and Haslam, 2003). As alluded to above, researchers have noted, and begun to pay more attention to, the process of MA change and its social, political and behavioural implications rather than the technical aspects of MA systems design (Scapens, 1994; Burns and Scapens, 2000; Granlund, 2001; Granlund and Modell, 2005; Ax and Bjørnenak, 2007). Since a positivist approach would neglect or mask such social issues and a critical realist framework is again preferred.

Equally, an interpretivist approach would be of use but CR is preferred for its multi-level analysis stemming from its triple ontological stratification as the effects of change primarily along social and political contexts might be more noticeable. An interpretivist approach based along the lines of the approaches mentioned above might consider issues such as whether accounting numbers and practices have symbolic roles and speculate (through interaction with a more critical perspective) whether they have a wider political purpose. The emphasis is on observing accounting practices and examining how and why each is used, and significant scope is placed upon interpretation: the researcher's own ideas and her or his interpretation of the interpretations of the practitioners are under focus. There is evidence of an increasing body of research taking an interpretivist perspective and examining accounting practice, utilising elements from structuration theory and institutional theories (Burns and Scapens, 2000; Drennan and Kelly, 2002) and actor-network theory (Jones and Dugdale, 2002). Taking an example of this research, Drennan and Kelly (2002) looked at ABC and through insights of institutional theory they found ABC implementation was driven in their case study by mimetic isomorphism, which is copying the practices of successful organisations in the same industry. However, a competing set of motivations emerged, specifically noteworthy was the author's proposition of a 'hidden agenda' behind implementation which was located at "a different level of management from the level that proposed and pursued ABC for economic reasons" (316). This hidden agenda alluded to an organisational-wide consequentiality of ABC adoption, in that implementation has knock-on effects on the organisation as a whole including the production of conflicting political interests, and a signalling to the firm and others that management was firmly in control. And it is in this mode that a critical realist framework benefits the research project.

Interpretivism aims to produce an understanding of the social world, whilst CR attempts to not only provide an understanding but through an interrogation of this understanding, to establish casual relationships. The effects of an agenda, hidden or otherwise, are an explicit consideration of this research project, as the aim is to examine how daily work routines as well as organisational relations, have changed since adoption of VCMA. In other words to highlight causal factors of shifts in organisational practices and routines, and to examine the extent to which such shifts are caused by the change in measurement bases and data collection methods that VCMA requires. Causality is not a concern of interpretivist methodologies, and so neglects the assertion that causal linkages included in VCMA models have become more prevalent and important over time (Ashton, 2007). Owing to the importance in causality in VCMA metrics, the research project also requires an explicit focus on causality in order to examine links made in empirical models between the use of organisational resources and value creation, as implicated in this process of value creation is a lucid set of consequences pertaining how implementation effects the management control system, as well as the decision making process at both strategic and operational levels (Malmi and Ikäheimo, 2003).

Further explicit to a CR framework is that of multi-level analysis. Whilst interpretivism can yield an understanding of practices and experiences, the understanding is limited to one particular research participant; critical realism presents a triple ontological stratification that is necessary in studying the contextuality of practice as causality and accounting change in the practical context is examined through the activation of mechanisms embedded in structures, across different levels of the organisation. In other words, that alteration is made to techniques out with the immediate real world experiences of lower-level employees and accountants and an interpretivist approach might only consider the immediate and neglect such alterations that cannot be confined to the experiences of lower-level employees. Moreover, an institutional theory approach would consider implementation as a result of complex factors, such as the adoption of a practice as a legitimating factor through mimetic isomorphism, and by focusing on these factors issues of daily work might be overlooked. Critical realism might also facilitate an understanding of practical settings by providing insights into the interrelationship between structures, potentials, and individual action.

Critical realism is also adopted over an interpretivist framework, owing to the advancements made on the structure/agency divide within critical realism. That the structure/agency divide pervades today is testament to its centrality as a debate within social science. At heart, the divide is centred around two opposing views on understanding human behaviour, and it contemplates the ways in which human behaviour is determined. On one hand, behaviour and action is determined and drive by a range of social phenomena, such as cultural, social or political factors, and one the agency is instinctual and guided by human interest.

Giddens (1984) is a proponent of a reconciliatory view of the divide, in that his theory of structuration aims to overcome the perceived constraints of structure by repositioning structure as a dualist concept containing an element of structure which exists as both the outcome and direction of human action. An agent is therefore limited in part by their interactions with structure, where factors such as social norms can frame agents within the social structure. It is, however, through acts of reflexivity that agents can negate the limits of structure as agents can monitor their actions against social settings and through gaining knowledge of how their actions are structurally contextual, agents can through subsequently different actions create different structures. For Giddens, agency thus produces structure. Archer (2009) debates such a logic, noting that the concept of reflexivity theorised in structuration limits the capacity of/for agency, in that reflective knowledge is derived from structural interaction, and that reflexivity is produced by structure; thus through the act of reflection, agents reproduce structural relationships which reinforces (and does not transform, per Giddens' assertions) social relations and further constrains human action within structure. For Archer (2009) a deeper understanding is required, which she elaborates in her concept of structural change, where transformative action arises from human action and behaviour: interaction between agents and pre-existing structures produces a change in structures in a longer timeframe. Here, the concept of morphostasis persists, whereby this process of interaction reproduces pre-existing structures and agents are deemed to be structurally conditioned: simply, that reflection by humans upon their actions is constrained by structures; that humans reproduce the cultural and social logics of existing structures and use this to guide behaviour and interaction with structure. However, more optimistically, morphogenesis can also occur where interaction results in a transformation of structures, but causal power is necessary for continued shifts in structures, and crucially, this causal power is exerted as a result of historical actions.

However, Reed (2003) attempts to provide further resolution of the divide, postulating critical realism as one of two possible reconciliations - the other being conflationism which is not discussed in full here, but is similar to Giddens' structuration theory in that the relation between agency and structure is seen as a dualism - however in an earlier paper, Reed (1997) notes a conflationist approach collapses structure into agency through the localisation of social practices that are in turn bereft of an institutional context. Under Reed's critical realism, structure and agency are maintained as separate analytical categories, where social practices and human actions are "embedded within extant social structures" (2003:302), such that agency is to some extent prefigured by contingent possibilities for creative generative restructuring. For Reed, this allows researchers to understand the "extent to which different social and organisational structures are open to varying degrees of modification and change through social action" (2003: 299). However, this perspective resembles structuration in that structures can be modified by agents through acts of agency, but perhaps the key difference is that structure (Reed, 2003) and organisational outcomes (Fleetwood and Ackroyd, 2004) are constitutive of structural power relations.

4.7.: Research Methods

In order to analyse how a technical accounting change stimulated changes in the daily work routines of organisational agents, and to depict the interaction process between accounting and its context, case studies emerged as the most apt method of qualitative research. Moreover, the adoption of a case study approach to analysis was driven by the potential to understand how the organisational contexts of management accounting are interrelated in the process of implementation.

A case study is a form of empirical enquiry that investigates a particular phenomenon within a "real life context" (Yin, 1994:13) and is a versatile research method which can be applied, generally, to positivist, interpretivist, critical theory and postmodernist studies in accounting (Ryan *et al.*, 2003). There are numerous applications of case study research on management accounting change (Hopper and Armstrong, 1991; Miller and O'Leary, 1994; Burns and Scapens, 2000) which suggests that it is an adequate approach. In particular, when contrasted with statistical forms of accounting research, a case study approach captures the human element, as well as the dynamic nature of human relationships (Langfield-Smith, 1997), which is often missing from the static analysis presented by statistical methods and survey data. Furthermore, case studies can elaborate upon these human relationships in order to provide a deeper examination of processes involved in such relationships, as well as an understanding of organisational systems (Ryan *et al.*, 2003), which are both central on examining the nature of organisational routines and causal linkages to accounting change.

Specific to case study methods, critical realism has been theorised as a vehicle to substantiate case research (Easton, 2010), and has emerged as a legitimate and preferred research method for some (Sayer, 1992; Easton, 2010). Within business research, critical realism is yet to have a considerable impact upon case study research, with few examples of its use. Indeed, as some have noted (Wuisman, 2005) there is a gap between the philosophical approach of CR and any methodological guidance on how a CR framework might be operationalised.

Easton (2010) laments the lack of sustained critical realist enquiry in industrial marketing, but provides a case study of the development of a buyer-seller relationship after the installation of a new management information system, whereby causal explanation was central to exposure of what caused service problems, what changed as a result and what conditions were necessary for their subsequent solution. Causal explanation considered the imminence of internal events which then interacted to cause the new event: within the case, organisational meetings and interactions between organisational participants served as necessary conditions that produced a "key in lock" that was central to the installation of a new information system. This lock served as the generative mechanisms and was developed from interaction between buyers and sellers. This leads Easton to contend that a critical realist case study approach could be used to examine complex phenomena within organisations and their relation to organisational relationships.

Fox (2009) also stressed the importance of a critical realist approach in case study research in order to increase understanding of causal mechanisms, and to interrogate the contextual factors necessary for the outcomes of actions. Actions and events were also placed within a social, business and technological context since Fox was concerned about the emergence and use of IT systems within organisations, which provided an account of agency as mediated through contextual interactions, in that agency would differ across context – being stronger in certain areas of implementation, but lagging behind structural influences in the development of technology - yet still produce events and changes in organisational experience.

Commonalities across these cases can be summarised thus: the influences of structure and agency are seen as dualist in nature, emphasising a highly contextual account on the drivers of both accounting and organisational change. Further, whilst generative mechanisms of change in each of the studies are different, there is some overlap to suggest that external events, such as rapid shifts in technology, produce internal outcomes, however it is unclear to what extent these external events are common across contexts, or whether technology is a constant generative mechanism in critical realist inquiry in organisations. On these issues, Ackroyd (2012) has commented that such CR research typically seeks a comparative case study approach where the main aim is to explore or examine the intersection of research context and generative mechanism, providing an understanding of how contextual factors and generative mechanisms have interacted with each other and produced time-specific and historical-specific outcomes. A CR-focused comparative case study strategy enables researchers to replicate an approach across contexts and to develop an understanding on how causal mechanisms can explain the prominence of social phenomena across contexts and thus to examine the interplay between macro-level structures and micro-practices (*cf.* Sharpe, 2004). This approach is useful to the current study where the main research aims extend to providing a contextual examination of accounting change, paying specific attention to the factors of accounting change, as well as the conditions under which organisational change is driven by adoption of innovative or novel accounting techniques.

There has been more recent attention drawn to the potential of CR as a framework for exploring accounting change. Bisman (2010), as above, has suggested a more theoretical approach in adopting CR, however, Stergiou *et al.* (2013) note the potential application of CR within accounting change, developing a case study approach that highlights the dualism of structure and agency in driving internal changes over the functioning of management accounting control systems; employing a CR framework to examine change within a family-owned Greek dairy company, they highlight the extent to which structural conditions influenced internal accounting change – notably in the form of Greek accounting reform and wider economic reasons – whilst exploring agential reasons for change – typically that family reasons, and the active involvement of a father as director of the company, led to shifts in the organisational structure, and the impact of decision making upon the construction and design of performance management systems.

The key insight from their paper, however, comes in the alignment of structure and agency, as they note from interviews with the accounting manager in the dairy firm that customer perception of products, as external events, established the need for greater usage of costing and profitability data, but that internally a greater degree of control by the directors over the budget likened to a "patriarchal style of control" (2013: 69) also necessitated a greater emphasis upon cost management, and that these instances together brought changes in the management accounting practices. Structural conditions are internalised in this case, to some extent, through manager-owner's decisions to implement particular practices.

Consistent with case study approaches utilising both a CR framework (Stergiou *et al.*, 2013), and those using institutional theories (for example Burns and Scapens, 2000) and other perspectives (Hopper and Armstrong, 1991), the case study for this project has collected data to reflect the variety of competing interests within the organisation. Firstly, owing to the multi-level analysis approach adopted through a CR framework, interview questions were prepared for participants in senior managerial positions, so as to capture information about the strategic and institutional context of the case organisation. Questions were also prepared to capture information on the implementation of accounting practices to determine an understanding of how particular techniques are aligned with these strategic and institutional influences. This is broadly consistent with a variety of case study approaches on accounting change.

Secondly, under multi-level analysis, similar questions were prepared for non-senior organisational participants so as to understand the separate influence of structural influences at lower levels of the organisation. By adopting this position, it is possible to establish different narratives on the reasons for accounting change, as the concerns of senior participants are discussed separately from non-senior participants. These questions focus also upon the nature of daily work routines as well as the potential impact that adoption of new techniques might have upon these routines. Such a task allows for the discussion of accounting and organisational change as experienced by organisational participants. Consistent with the theorised approach of CR (Modell,

2010) and case studies (Fox, 2009; Easton, 2010; Stergiou *et al.* 2013), this allows the researcher to identify how change can occur within the domain of experience and when combined with interview findings with senior-level participants, to identify the generative mechanisms that structure organisational participants' experiences of change (*cf.* Model, 2009; 2010). The processes and conditions in which mechanisms generate effects which can be observed by a researcher in case study research as an event that occurs in the domain of the empirical. Background effects that have not yet impacted upon participants experiences remain within the domain of the actual as an actuality, that has not yet been fully captured by participant's actions or behaviours. In short, actualities can be observed by researchers as an event that actually exists but that resides outside of the awareness of case study participants. Crucially actualities may yet still influence experiences, but not on a conscious level. It is this position occupied by a critical realist researcher that allows for accounts of both accounting and organisational change to emerge from the combinatory insights of empirical observations, and conceptualisation of such background events.

Interview Method

This thesis has followed a semi-structured interviewing pattern, which entails the use of a pre-determined selection of questions, but the interview process allows for deviation from these questions should the researcher seek elaboration or clarification of a particular issue, or at the request of the participant who might stress individual concerns that are not initially related to the list of questions used. This presents some advantages over both structured and unstructured interviewing, for example, allowing participants to recount various issues that they perceive to be important; such issues might be neglected by a purely researcher-led structured interview. This allows some flexibility in discussion by participants rather than adhering to a static list of questions. In this sense, structured interviews appear to slightly problematic to the analysis of MA change within organisations, as this would necessitate the researcher clearly delineating spaces in which accounting operates. Researcher-imposed boundaries would further endanger the wider discussion of background events because although these may be experienced by participants, I as the researcher would lack any organisational context and would risk misinterpreting such background events to be of significant importance in their narrative of change. In a similar manner, unstructured interviews might delve too deeply into areas that stray from accounting, or in some senses into areas of conflict that do not stem from accounting change. A semi-structured path, perhaps, represents a middle-level approach between these two positions, allowing for some exploration of issues regarding change, and importing a loose sense or progression to some pre-defined ideas on change.

This study, similar to Abeysekera (2008), adopted several procedures to ensure a greater degree of reliability in using a case study based interview method, notably: managing the interactions between participants and the researcher; using a semi-structured format which assisted the researcher to guide the interview process if respondents moved discussions into matters concerning confidentiality or personal conflict; and the researcher taking notes during the interview process. In a practical fashion this amounted to using recording devices, specifically an analogue tape recorder in earlier interviews and a digital MP3 voice recorder for the remainder of interviews[5], allowing me to take notes during each interview stressing what I felt were important considerations raised by the interviewee. By actively taking notes, I also felt that I could focus more on my interaction with the interviewee, as disengaging more from the process allowed the interviewee to lead the conversation and to stress points they felt were important. In some situations, prompts were necessary, but I feel that the semi-structure process allowed for greater flexibility in choosing prompts, which were largely initiated to indicate that the interviewee can continue on the point if they wished to do so. I believe that by choosing a semi-structured interview format that I ensured a greater degree of control of the interview process as this permits elaborations when necessary and probing into more specific areas, which allows a deeper understanding of the human issues to be gained.

In terms of a critical realist research design, interviewing allows for a probing of contextual factors across organisational levels and thus matches the drive to qualitative research under CR. Research into the introduction of novel information systems and cost management innovations suggest that changes arising from implementation may not bring about the desired effects within the organisation (Bhimani, 2003). 'New', updated or novel systems can be administrative rather than technical in nature and as such, their implementation is not independent of the preferences, goals and strategies of top managers (Bhimani, 2003, McGowan and Klammer, 1997). Furthermore, a variety of behavioural and organisational factors can be intertwined with the implementation of

[5] Owing to technological obsolescence

a costing innovation. This suggests that the prevailing interests of senior management might affect the implementation process and how the new systems might be used. From a critical perspective, there is also the suggestion that costing innovations might be used to further antagonisms between capital and labour, and in this respect, costing innovations would support the prevailing interests of capital and preserve the organisational status quo. Accordingly, the interests of senior management must form part of the multi-level analysis of how the organisation has changed as a result of the implementation of VCMA.

The aims of this research project are to evaluate changes in MA in practice, which semi-structured interviews present a distinct advantage for exploring accounts of change within case organisations, allowing for some deviation from what is captured, a priori, through a prepared list of questions and allowing the interviewee to discuss working life more generally. This general exploration of organisational experience might indicate the underlying causal mechanisms that drive change. Structured interviewing would ignore contextual effects, which is essential for understanding change, as well as evaluating effects of such practical change on daily practices and work routines.

However, several disadvantages also exist in utilising semi-structured interviews. Firstly, data analysis is more complicated compared to structured interviews as codification of results allows for fewer interpretations and aggregations. Secondly, an interviewee might waffle and provide too much information that is ultimately irrelevant. And finally, the interviewee might be reluctant to personally reflect on experiences and become guarded in response to particular lines of questioning.

4.8: Ethical Considerations

Interviews, and the research herein, were conducted in accordance with the ethical guidelines and precepts as set out by the Guidelines for Ethical Research at Heriot-Watt University, and each participant was made aware of these guidelines prior to interviewing. Each participant was then offered the choice to back out of the research process if they felt the guidelines did not represent their best interests. I am pleased to say that no participant exercised this right. Consent forms were not used in the interview process, but participants were recommended by senior managers within each organisation, and permission was sought at this level of the organisation before approaches were made to individual participants.

One of the most enduring ethical concerns about conducting qualitative research is the direct participation of others. In interviewing it is up to the researcher to judge if the line of questioning is permissible, whilst pursuing answers to their questions. As Babbie (2009) notes, social research can manifest in negative personal reflections after the research has been conducted. Thus a particularly fervent line of questioning might evince some moral reflection by the interviewee, which can then risk damage to self-esteem. In attempts to mitigate any negative impact of the research process, each interviewee was offered the choice to review my notes upon transcription to examine whether they felt misrepresented by my assertions and allowed them to reflect on what they actually said during the interview so as to curb any potential 'dwelling on the issue' as it were. Some interviewees in both cases exercised this choice. Furthermore, qualitative social research, as conducted in this thesis, involves entering the personal and organisational spaces of participants in order to discuss aspects of their organisational role and, owing to my commitment to an emancipatory axiology, issues of conflict were probed leading to the disclosure of personal information. Therefore, in acquiescence with the guidelines, each participant was accorded the right to anonymity, which each interviewee has eventually exercised, and their personal responses have been kept confidential and not been disclosed to anyone in their respective organisations. I can further attest that any information that might lead to the identification of a particular individual has also been removed.

This last issue of anonymity and confidentiality was most important for senior organisational participants in both case studies, particularly because I as a researcher had access to company sensitive information, such as internally developed accounting and valuation models. Whilst during the first interview schedule each senior participant was content to be named and their organisations also identified in the thesis, the recent financial crisis has meant that the senior accounting staff in EquiGrow did not wish any potentially sensitive information to be disclosed in the thesis. This primarily relates to information contained within internal documents, meeting memos and technical training seminar material. I have not disclosed any of this material within the thesis, and models presented in chapters 5, 6 and 7 have been modified to remove explicit references to either organisation, and in accordance with senior managers, these models have been made more generic and less company specific. Obviously this might compromise the analysis somewhat, but each manager has assured me this should not be the case.

4.9: Limitations and Conclusion

Owing to the contextual emphasis of case studies, perhaps the most basic critique that can be levied at case studies is the lack of generalisation that they offer. Since this project is examining specific configurations of accounting relevant to two case companies, analysis will be highly time-space specific, and ensuing conclusions will lack generality to or for other organisations.

Tied to this criticism is that of validity. Critical realism, as with case studies, is highly contextual, and with the inherent lack of generalisability, the validity of research analysis too becomes problematic. Within qualitative research, validity issues can be negotiated by adopting a form of research triangulation. However, any form of triangulation would include both quantitative and qualitative aspects (Yin, 1994), which not contribute to the scope of the present study, because the static nature of any quantitative approach, for example through survey or questionnaire responses, would deem it irrelevant in analysing patterns and aspects of change in the ongoing organisational and socio-political interaction with accounting.

Broad suggestions within the literature have been suggested to overcome the validity problem (Easton, 2010) which have targeted the use and collection of multiple sources of data during the research phase of the project, in order to provide a deeper and richer portrayal of the social and organisational settings of causal structures and generative mechanisms that influence action of agents and that drive accounting change. The collection of multiple data has the purpose of allowing the researcher to develop alternative explanations of the findings (Ferreira and Merchant, 1992). Moreover, by using two case companies, it is hoped that conclusions drawn might be broadly consistent and thus alleviate the problem of generality.

More fundamentally, however, there are issues and limitations that stem from the adoption of a critical realist position. Despite advancements within CR and its potential contribution towards the structure/agency divide in exploring accounting change, there is no guarantee that pursuit of a CR framework will generate success. Bhaskar (1989) is cautious to not make such claims, noting that instead of providing a substantive set of practical policies for conducting research it presents a series of perspectives on theorising society and human action. Furthermore, that utilising these insights can guide empirical investigations into the structures generating social phenomena. Magill

(1994) debates these claims and argues that CR attempts to provide a universal ontology and in so doing operates closely in the direction of an ideology in that following such a universal ontology fences off pluralist debate by constraining opposing views through the lens of a stratified ontology. However, the framework present within explicitly acknowledges that the operationalisation of a stratified ontology allows for struggles to be located within specific layers of the organisation. Further still, that the multi-level analysis allows for tensions to be examined within the relationships between organisational participants across the organisation, and that the choice (on a general level) of a methodological framework fences off debate from other perspectives; whether this takes the form of a local or global closing down of perspective is a moot point.

The choice of methodology here also relies heavily upon Archer's theorisation of agency and the notion that agents become structurally conditioned. The framework is also built on the idea that there are important background events which contain hidden mechanisms of change, and also contain areas of struggle, which expose contradictions between logics and demand conceptual reflection. An interpretivist framework, with a different focus on structure/agency, stresses an alternative focus and misses this potentially deeper level of theorising that critical realism can contribute. However, this contribution can also be a potential limitation of the study, as the critical realist position perhaps places too much importance upon background events. In addition, critical realism in organisation studies is theories within an anti-capitalist political view, where exposure of capitalistic practices/relations is a central concern; consequently this stress on background events might be conceptually important as presenting a space outside the control of capital in which to understand agency, and that such a space lends itself well to a Marxist axiology, but with a more global set of concerns, the focus might not be valid for wider application. These issues are returned to in chapter 8.

The purpose of this chapter was to outline the methodological approach adopted within this thesis. Consistent with this purpose, research perspectives were introduced and discussed alongside methodologies of accounting change. The thesis adopts a critical realist framework, which was also elaborated within this chapter.

Chapter 5: Practical Context of Value creation – EquiGrow

5.1: Introduction

This chapter focuses on the interview responses from organisational participants at EquiGrow and details their experiences with and perceptions of how VMCA currently operates in their organisation. This line of investigation also considers how their daily work routines have changed, if at all, due to the implementation of these techniques. The first round of interviews probed issues of technique adoption, usage, and discussed problems relating to their implementation whilst second interviews discussed their eventual infusion into the MCS and any resultant organisational changes.

5.2: Company Background: Context of Value Creation

EquiGrow is a UK subsidiary of a European owned financial services company, providing financial services to clients in the UK in addition to competing as a market leader in insurance and pensions, with an estimated 2 million UK customers. The company, globally, employs around 35,000 people, whilst there are around 4,800 employed in the UK as at April 2010. In 2007, EquiGrow reported operating earnings before tax of just over £180m, representing growth of 20.7%. This growth in earnings is indicative of EquiGrow's value creation strategy which in 2006 was represented operating earnings before tax grew by approximately 37% on 2005 figures. Furthermore in 2007, the organisation estimated that the value of new business and new clients had increased by around 28%.

During the first round of interviews, the senior manager of EquiGrow revealed that the overriding focus of the parent organisation is to secure sources of growth. For the parent this was to be achieved through the expansion of existing operations into new and emerging markets. In the UK, this focused upon the acquisition of new business and the development of two of its key business areas: Insurance and pensions services; and Asset management. Thus customer analysis and relationship management emerges as important areas for EquiGrow, as identifying new customers is paramount to achieving strategic aims. The following vignette summarises this position:

“Our pensions arm is one of the most competitive in the UK […] alongside our asset management services, these two areas currently account for around 70% of earnings before tax […] so far this year [2008] the value of new business is up 16% on 2007, and in pensions this amounts to 3% up on 2007 and a 1% increase in third quarter new business compared to first quarter (…) and we continue to have plans to expand our pensions business through 2009

Interviewer: What does this represent in terms of actual new business clients?

Respondent: Do you mean new entrants? If so, I think, the level of new entrants has increased by something like 17%. I know the figure is around £200m in new policies and activity. We’ve also had exceptional growth in corporate schemes and if we want to maintain a good level of overall growth and to move forward we should continue to attract new business” (SM, Aug 2008).

5.2.1: Customer Analysis

The usage of customer segmental analysis and customer valuation models at EquiGrow UK has increased over recent periods and they have become important analysis techniques for accountants, marketers and financial analysts and sellers within the organisation. The company updated their internally developed version of CLV in 2001 and again in 2006; both models were developed internally by the finance team. However, the company updated their IT system in 2007 in conjunction with information needs of revised metrics developed by financial analysts. To elaborate, the newer model necessitated a slight change to the IT system in that new information was required for processing customer claims and in providing more reliable estimates of customer value, consequently analysts felt that the IT interface “needed to change also” (FA1, Sep 2008) to reflect the new variables and to ‘generally be more user-friendly’ (HR, Aug 2008). This last change was at the insistence of employees, who felt that the old screen layout was ‘irritating’, ‘too complicated’, ‘fiddly’ and ‘painful to look at for a whole afternoon’

The initial internal model, prior to updates in 2001, resembled a loan-pricing type model, akin to LCPA described in chapter 3, which was used to monitor movements in customer group profits as well as to price customers over the expected value of their contract-life or agreed policy terms. However the CLV-type model used focuses less upon a contract view of customer life, but related to expected tenure of life based on internal measures and acquisition rates generated in cooperation between the finance and marketing teams.

Furthermore, the CLV model used and developed internally is not as sophisticated as some in literature, in that there are no exit rates or costs included – only retention is explicitly mentioned and there is some probabilistic arbitrary measure of the costs of acquisition. Analytically, this differs from both TMA and VCMA on a theoretical basis, as the CLV model used assumes a continual supply of customers – by not including exit costs, the model does not consider that once a customer has left the company that they are 'gone for good', which underpins more recent models described in chapter 3. In this sense, a customer that has had a bad experience with the EquiGrow might want to return in future periods, and so the ex-customer returns to the market where they can be acquired through various marketing schemes or strategies, and constitutes an assumed never-ending or infinite pool of potential customers.

For senior managers and financial analysts the power of the redeveloped CLV model was in its role in identifying potential new business, as it has allowed the analysts to identify which customer groups and demographics are most valuable and there have been discussions toward developing a range of possible tailored products for these customers, which is linked also to EquiGrow's CRM initiatives. In addition, analysis of CLV has revealed which particular products of the company are most valuable, such that analysis has shifted inwards through CLV in order to evaluate which products might be most valuable to the organisation. The rationale of this is to discuss which products might benefit from either increased marketing or, more strategically, which pensions, insurance or asset management services could be offered at lower cost to clients in order to attract new business by operating some services as a loss leader. This, it was felt, could be key to meeting their stated goal of securing sources of new business.

Currently with the CLV information, financial analysts "use the data [generated by the system and input by processors and claimants] to identify possible investment opportunities" (FA3, Sep 2008). To do this analysts "look at which types or groups of companies [we've] invested in before and compare that to the returns [we've] been getting and what that's done to the clients' fund in the past." This historical data is then used to extrapolate an expected return in future periods and any “sound investments” are likely to be repeated or recommended.

CLV is thus used both as a means to identify valuable customers that are then offered specific packages in terms of fund investments – that is, increased investment could bring or generate higher returns for the customers - and as a tool for capital investment decision-making through the analysis of possible alternative courses of action and ranking or viewing of alternatives on the basis of their contribution to an increase in value. With regard to the latter aspect of CLV, it was further stressed to identify possible lucrative investments. In this sense sharing similar underlying principles with traditional investment tools; there emerges a practical similarity between CLV and TMA – whilst the underpinnings of calculation appear to be slightly different, and the theoretical influences behind the models being vastly different (that with CLV the theoretical influences include consumer behaviour theory and marketing, compared to financial modelling and economics/econometric theories for capital investment tools) the practical usage overlaps around the investigation and analysis of potential alternative investment decisions.

However, another use was identified by senior management, in that the widened CLV measure was being used to assess value creation and to determine bonuses for financial analysts and sellers. For the first purpose, “any fluctuations in the long-term value are identified, and the manager or department responsible is [invited to a meeting and] asked why there have been movements in the longer-term” (SA2, Aug 2008), implying that the CLV technique, in operation, is similar to the espoused usage of CE measures within the literature. But when prompted on this point, a senior accountant noted that whilst the rationale of accountability might be similar, the models, as discussed within literature, is too complicated to actualise in practical contexts, noting that massive structural changes to the IT system would be needed and that these would be too costly. In addition:

“we’d need to overhaul the entire software system to calculate the long-term value, or whatever that Greek letter means, and we’d need to show separately for analysis. Unless the finalised figure can be split across selling teams with the click of a button” (SA2, Aug 2008).

Inherent here is the 'need' for an instantaneous measure of value, which the senior managers felt was provided by the CLV metrics in use. This also brought a real-time judgement of how effectively the strategic objectives of attracting new business were being met by financial analysts and sellers. Sellers felt that by having this emphasis, and by linking their performance bonuses on a timelier basis their work practices were altered. Whilst there was explicit guidance and measures from HR and the accounting department that provided objectives for sellers, this background emphasis on bonuses and the implied value tracking procedures discussed by senior management produced shifts in their daily work routines:

"Last year I would actually try and arrive as late as possible in the morning, you know it wasn't really worth rushing out to get the [earlier bus service], and me and [a colleague] would also try and take as many breaks during our shifts as possible... the workload stayed the same and we weren't really under pressure to do more, but the now we all work a bit later and I get a better bonus if I do more work... there's still a set number of policies to try and sell, but the team knows that getting more out of the door is better for [managers] and for us too" (FA2, Sep, 2008).

As a result of this value creation bonus and awareness of managers' value tracking practices, sellers voluntarily intensified their own working practices and habits. Thus a very real change in daily routines was instigated by alterations in CLV measures. This was common for customer service and claims processors employees, and is covered in a later section.

The most challenging aspect of implementation of VCMA for accountants was the used of IC and CLV metrics, which were difficult to track at first and brought about a more detailed focus upon target management for employees, such that the nature of HRA became less financial with a greater emphasis upon improvements in processes driving cost reductions through greater efficiencies. On this last point, one accountant clarified:

"The main purpose of focusing upon improving processes is to engage in cost-reducing measures to minimise costs across the provision of client support. If we collect data on processors' activities, we can identify which areas or activities can be improved and by improving them and reducing idle time we can bring costs below budgeted levels" (A2, Sep 2008)

This facilitated a shift in the cost management focus away from cost control and meeting expected cost levels towards a notion of continuous cost reduction, which further entailed more frequent reviews; under previous labour costing there would be quarterly reviews of cost levels, but the process became a monthly event, and this was also done in conjunction with the HR function when assessing team performance. On the job performance and costs were weighed up against expected levels to see where reductions and gains have been made. An unexpected effect upon many customer services employees was added stress, and the measures were seen as a source of tension within teams, in that workers feel scrutiny of work processes. For senior managers, however, these changes reinvigorated the search for value, as any reductions equate to increments in profit and value respectively.

5.2.2: HR and performance measurement

Within the organisation there are daily meetings held at 10am, lasting on average 15 minutes, attended by teams of customer claim processors and team supervisors. The remit of these meetings is a continued discussion of progress made and target objectives. Set out by HR policies also, the meeting is intended to be used to provide feedback to employees on their progress and outlines cases of customer satisfaction in an attempt to increase or maintain levels of staff morale, which is evident amongst some processors claiming that the daily meetings are:

"Basically a team morale thing" (CS3, Sep 2008), and "like a big huddle" (CS4, Sep 2008) the latter evoking a sporting metaphor to explain that the purpose of the meetings are to maintain focus on achieving important ongoing objectives. Furthermore one respondent felt they are similar to "a pick me up" (CS1, Sep 2008).

The team meetings were set out as part of an employee section of performance measurement that is implemented as part of EquiGrow's ongoing quality control. The espoused benefit from the HR director of this to "give an insight into problem-solving and how our employees can improve processes" (HR Aug, 2008), hence there is an element of the meetings on problem solving. Similarly, there is an equal aspect on empowerment.

However, perhaps the most enduring feature of the team meetings is on continuous improvement. Daily review meetings can be used as identify operational and processual weaknesses or lags in daily working tasks, and with the input of employees these potential wasteful activities could be reduced. Through continued exposure to rehearsed practices, it is possible for employee's knowledge of tasks to increase which would also decrease lag time and delays.

This approach might be seen, problematically, as emphasising targets too much, elevating them to a higher status, privileging them above the actual underlying aspects of processes and principles of customer management undertaken by the organisation. For instance, the continued foci on targets and achievements might encourage an instrumental or means-end logic to jobs and tasks, where the focus remains on 'getting results' perhaps to the detriment of the customer relationship, as the means of meeting targets is irrelevant owing to the privileging of target achievement. This fear is not unfamiliar to team leaders holding these meetings, claiming that "perhaps there's too much attention given to management targets" (CS4, Sep 2008). This was first seen as a problem initially as workers would mimic the meetings in a sardonic fashion by continually referring to the targets and so on, and would approach each case as a series of boxes to be ticked, but that behaviour was stopped as the bonuses became linked to targets and so they became serious with regard to meeting targets.

Equally the converse might be true, as achievements are de-emphasised by continued discussion and become routine, forming part of the organisational lexicon so that any impact from target setting might be reduced as employees become too familiar with the idea of targets and view important goals as ordinary or with indifference.

Quality measures have been seen as restrictive upon employees, whilst others have noted that quality measures have provided arbitrary measures of turnaround time, there are no other immediately visible effects upon the organisation or their work process, in that nothing 'real' has changed about the job done, but pressures have been added (supported by):

"I'm expected to give the policy holder the same attention but to complete and process claims in a shorter time" (CS1, Aug 2008)

"Anything flagged up by the system for quality has to be referred to a team who are supposed to look at what you've done and how you've dealt with customers. If you know that you have something referred for quality checking then you worry there's something wrong with the claim, or you've done something wrong... It distracts you" (CS4, Sep 2008)

This was certainly evident upon initial implementation, as employees recounted several stories and problems, but as the topics of meetings changed, quickly attitudes changed too:

"It's a balancing act – at first they weren't comfortable about discussing targets all the time so they viewed it as a bit of a joke… a bit of work banter… [T]hen we realised what was important so gave more time to the important ones and left the other ones [the less important objectives] to the background" (HR, Aug 2008).

HR management discussed accounting practices and a range of policies which were introduced and they reveal a heavy emphasis on targets and performance measurement, as well as the expensing of training costs. This was deemed possible because of an internal emphasis on training and echoed notions of evaluating value-adding activities:

"By categorising training costs in that way (as a liability), we could see how much money was being spent on annual training schemes… that allowed us to compare spending with the actual results from our performance reviews to check if we were getting anything out of the training scheme, or if it was just dead investment" (HR, Aug 2008).

The idea of value-adding activities stems from a drive by the parent to uncover waste in internal investments. A similar logic is acknowledged by the HR manager:

"[I]f the training spending isn't getting us value for money, then we are left with some very clear choices: either we don't spend as much on future training, or we question the content of that training and look to change [it]" (HR, Aug 2008).

The emphasis of value for money and a potential lack of investment points towards VCMA as a means of identifying efficiency gains, in that value for money can be linked to processual and monetary efficiency. Measures of HRA in this case study are driven towards achieving a greater transparency of how employees are managed; specifically HR profits and costs are measured as financial outcomes and compared to targets set by top management. In this sense, HRA are used as a wider tool of human resource management, where targets are incorporated and set in conjunction with strategic objectives, such as to encourage employee and management goal congruence towards the creation of value. Quality management approaches are linked to meeting strategic objectives and to the measurement of employees in job performing.

EquiGrow previously used an excel spreadsheet as a quality monitoring scorecard where items where weighted against various aspects of call handling for claim processors on areas of:

Greeting skills/Listening skills/speaking skills/call handling skills/assessment and issue solving skills/procedural requirements/closing skills.

Each area included key performance indicators (KPI), and were scored against either a "yes" or "no" depending on whether the processor satisfactorily met the expectations of performance, for example, if the processor followed procedure in notifying the customer of any account changes or if they asked the customer to clarify their account or investment details before proceeding to handling any client queries. The scores are then added and given an weighted score which is pre-determined by formulae in the spreadsheet. If the score is above a specified level, performance is deemed to be satisfactory, and if the score is below the level, performance is poor. In instances of repeated poor performance, the processor is "flagged" and a review meeting is scheduled to identify why performance has been poor, as well as to encourage better performance. This represents a "strike" against the processor and is, according to some processors, part of a 3 strikes system.

However, this method of quality management was time consuming and deemed to be too costly by managers, so the process changed to a checklist where overall scores are matched to the IT interface based less on yes/no performance criteria, but on a range of timings and condensing dates from customer calls into a range of criteria. The scorecard approach to quality was modified and adapted to include industry best practices relatively easily, without requiring the construction of a new scorecard or measurement system. Facilitating this was EquiGrow's own internal balanced scorecard system, which was also used to assist in management of intellectual capital resources.

5.2.3: Intellectual Capital and scorecards

EquiGrow have IC reporting and measurement practices in place and have tied them to the company's desire to increase growth and firm value. This has culminated in two particular areas: more measures in the innovation category of their scorecard and through the publication of a value report (described in more detail later in the chapter).

However, the senior accountant expressed a desire to increase their online reporting and disclosure of intellectual capital information, as they feel "lagging behind" European competitors in the area of online IC reporting. Various knock on effects for accountants were noticed due to increasing the extent of IC measurement and reporting as this required increased data gathering and the production of more reports: implementing more VCMA measures, in the form of IC metrics, correlated with a shift in the daily work routines of accountants.

Internal control of IC is achieved through the use of a balanced scorecard system, which has gradually grown in scope since initial implementation. Here metrics are used to measure innovation (in terms of increased value and through increased returns) and VCMA allows the monitoring of innovative performance, where performance is deemed to be poor if value has not grown to expected levels. In this sense, IC metrics simulate management control of resources and assessing performance in relation to strategic objectives of value creation.

The most recent additions to the BSC system include a more detailed analysis of Innovation, including more focus on human factors and social indicators of HR performance. This is tantamount to measures of absenteeism and training costs relative to wage spending figures, the logic being that this comparison provides a platform to evaluate value added areas, as well as value realisation.

From this HR developed more (pervasive) targets and greater incentives for financial analysts. Job factors for accountants means collection of softer information and production of more reports, less calculations. These softer factors are expressed in reports to internal boards only, and are not published. Instead they are used primarily as a management tool to enhance organisational performance and goal congruence towards achieving strategic growth targets.

In this sense a change to data gathering procedures in capturing softer information has been driven by a change in what is being measured. Measurement is conceptualised as a causal mechanism for organisational and accounting change, under a critical realist framework, effects on work practices can be easily summed below.

Work practices are altered in the long run, but in the short term they are largely unaffected but for the drive at the end of each reporting period to synthesise large volumes of data in order to produce reports for managers. Owing to the lack of aggregated non-financial performance measures for external purposes, there are no perceived pressures to fudge information or to hit specific thresholds, beyond reaching targets by financial analysts.

In their BSC system are KPIs included across four basic organisational areas, being: Market, Internal Management, Innovation, and Human Resources.

For the Market segment of the BSC, there is a detailed analysis of the company's market performance which devolves into a comparison of market share against the share held by competitors, as well as the number of insurance and financial services contracts and a comparison of fulfilment rates against published rates of competitors.

Internal Management indicators largely focus on the success, or failure, of the company's infrastructure. Fundamental measures in this section include an increase focus on the efficacy of claimant processors which evaluates claim turnaround times, query response times, and for financial analysts and financial product sellers numbers of client contacts are aggregated and appraised.

Innovation as a key concern is mobilised around innovative products. These are also measured by the amount of new clients that are attracted to the company in the reporting period, as well as for monitoring IC performance (as noted above). Annually, rates of customer migration from the accounting and finance departments are compared to marketing measures of new clients, and if the amount of new business exceeds the amount of lost or migrated customers, innovation is deemed to be a success.

Work routines are again altered here when practices are coupled with the strategy of growing value. This is elaborated in the following section which covers an analysis of the second interview stage.

5.3: Further Effects and Changes

Due to circumstances caused by the financial crisis and the collapse of banking and finance institutions, EquiGrow instigated cost management measures alongside a stated strategy of value creation, in that the senior accountants had decided to reduce staff levels and as the company owned two buildings in the same business park, they decided to merge common operations to an extent and to focus more on their insurance and pension business.

The senior accountant recognised the espoused links between continuous improvement and value creation, claiming that by knowing the job and the processes, employees can get better by eliminating processes that waste time. Such a position places an emphasis upon employees to identify such "time wasting" processes. However, in the second interviews this was also reflected in a number of job sharing initiatives, which involved customer service employees being directly involved at the policy and pension selling stage.

Processors and customer service advisers, as part of the branch wide job sharing, were given additional responsibilities as a result of their expanded role. However each interviewee from the customer service side stated that the additional responsibilities required training, but this was never provided. The senior accountant, in response to this issue, highlighted the cost reduction measures and alluding to similar decisions from the HR manager:

"[There is] no readily available money for training them in sales… and they should already be familiar with the needs of customers in their positions in customer services and claims… any training in sales will only tell them what they know, and that is how to deal with customers' needs. Since we are trying to reduce operational costs, [training in sales] seems blatantly pointless, because [representatives from the HR department] have consciously earmarked customer services as an area where we can get the most out of existing know-how: they've already had personal contact with customers and they know the processes involved; the only real change, if you will, is a reversal of the process: they now call customers instead of being called by them!" (HR, Sep 2009)

The HR manager reiterated this point by noting that training measures for this short term organisational readjustment "doesn't offer many benefits for the costs involved", particularly because customer services and sales use the same directories and on-screen interface to record information, and "we assume that [employees in customer services] already know how to negotiate that system, so any additional training we offer them would be wasteful". Rather than diverting resources toward (re)training, the HR manager offered the possibility of on the job training, where employees involved in the job sharing initiative were invited to observe sales teams over a sixty minute period. It was felt that this hourly session was adequate as customer service employees would "only be required to cover sales' employees once a week" (HR Sep 2009), and the main idea behind observation was that employees could "learn the selling process" (SAM, Aug 2009).

Whilst the need for training was a contentious point from both parties involved, what did emerge from the process of job sharing is a changing attitude to customers.

EquiGrow still operate two distinct sets of HRA practices, one set of measures that are primarily quantitative in nature and one set that are qualitative. The qualitative measures that are in place stem from the implementation of a balanced scorecard approach, in that measures of employee from BSC are heavily emphasised as part of the HRA system. Quantitative measures include primarily financial targets and common recruitment and employment costing, but these practices are gradually decreasing in organisational importance, because of the rise of such softer measures that are seen to be more reliable in capturing information. Furthermore, the HR manager felt that softer numbers in qualitative approaches also provide a sounder platform for setting more accurate targets for employees in each department:

"When we set targets we try to speak to each of the departmental managers [regarding common measures] we get an idea of what is of concern for each of them. Then we develop a list of goals and encourage feedback on their feasibility… and what we've seen from this feedback process is that in most departments, managers prefer to use [softer measures]" (HR, Sep 2009).

Thus, organisational measures of HRA have moved from attempts to value organisational human resources from a primarily numerical approach of placing a monetary amount on HR to a wider set of metrics aimed at capturing notions of added value. Through this move, emphasis is placed on areas of work where the specific and unique contribution of employees can be noted and this information is used as the basis for a report, as well as setting targets so that value can be created on a longer term basis. Consequently HRA has moved from a financial practice of measuring costs and investments, to a system of management reporting focusing upon intangible aspects of work and value.

Upon a synthesis of the multi-level analysis, insights from the interviewees revealed that performance is broadly conceived by organisational participants as a triumvirate of functions. Firstly, performance is portrayed as a notion relates to individual measures of output and is connected to success of the individual employee. Complementary to this notion of performance, a similar application is ascribed to teams, or groups of employees, as the groups can be defined as case workers and claimant processors, where performance is related to the achievement of specified outcomes. Consequently, performance here relates to the achievements of individuals and value is created when agreed targets are exceeded. Interestingly, the notion of value prevalent in this sense of performance measurement is simultaneously shareholder value and employee value. It is assumed by managers that individuals working towards common goals can lead to a creation of value for the company and for the individual themselves. This notion intensified during the second interview phase where bonuses for financial analysts and sellers were tied to new business acquisition metrics.

Secondly, performance also concerns the success or failure to implement organisational objectives across departments. In this sense of performance, the collective achievements of each department are judged against predetermined criteria by departmental managers, and are then aggregated to create a sense of organisational results. Shareholder value is created in this process when departmental performance exceeds expected levels of performance, for instance if the pensions arm of the organisation sells more policies than anticipated a monetary surplus is created. If deficits are held by some departments, then value is created as long as there is an overall aggregate surplus. In this sense, each department has the capacity to create and destroy shareholder value.

Finally, performance is equated to organisational performance in relation to success within the industry, where value is gained relative to the industry in cases of realised gains over and above estimates and benchmarks.

In each state of performance across the organisation, an emphasis is placed upon the creation of value, with the assumption that if measures are being met by individuals and teams, organisational departments and within the industry, then organisational performance, as a whole, is enhanced, and thus the potential for value creation is greatly deepened. This stated focus on value creation has again intensified since the first interview process in 2008.

Throughout the process of second interviewing the financial crisis emerges as an important generative mechanism of causal change across the organisation in so far as the crisis was stressed by several employees in EquiGrow as driving changes in organisational routines. The main response to the crisis stimulated change via an increased search for efficiency which was implemented in conjunction with a more sustained strategy of value creation. Here, under a critical realist framework, the external market crisis acts as a mechanism, and hence a structural influence, for strategic change, and the subsequent strategic change as a mechanism for organisational (routine) changes through job sharing initiatives as elaborated above.

The most recognisable accounting change was the continued abandonment of non-traditional accounting techniques and practices, as underpinned by top-level management decisions; for instance innovation was abandoned as EquiGrow sought to consolidate its position within the market by emphasising successful services and financial products and delimiting their range of services that were less profitable. Subsequently IC management metrics were a key feature in driving this change, coupled with the strategic focus on VC, it was felt that "by returning to what we know, we can cope better with the crisis", suggesting a decreased focus and importance on innovation and instead a return to the tradition. Perhaps this was motivated by a search for efficiency, as value creation was increasingly tied to notions of crisis recovery, which is explained below with reference to the value report.

As part of their implementation review, the managers wanted to develop a better risk management system, but were unclear on how to proceed beyond the obvious practice of catching up with competitors:

"we've identified areas where we're behind industry best practice... we believe that we're amongst the best for our regulatory risk models and analysis, but think we could be doing better in how we deliver financial products ... [for example] we know that we can improve our commercial negotiation processes with our business partners and... focus on how we can overcome risk with partners to ensure delivery of our product is not compromised by changes in the economy" (SAM, Aug 2009).

Emphasised also was a link to "value realisation", where as part of the risk management process, managers identified that they wished to review processes such that the realisation of value for both business partners (being viewed as customers in some cases) and for company and its shareholders, in that managers stressed shareholders and value for them, as well as holding on to some rhetoric about providing value for customers.

The senior accountant and the three financial analysts felt no such conflict between the provision of value for both customers and shareholders. The senior accountant in particular felt that by looking at customer satisfaction as a value driver, the company had customer's interests at heart, and by keeping them happy, they would continue to purchase financial products or continue to invest in funds with company. Satisfaction, it seemed, is a determinant for sustained company value: "by keeping customers happy, we keep shareholders and investors happy" (SAM, Aug 2009).

As a result of the increased internal use of customer based metrics, the senior accounts manager noted that board at the parent company noted an increase in reported and measured customer value. Such that increases in customer value stemmed from the visibility effect of the techniques, and more value for the firm was uncovered, which was then communicated to investors and shareholder via the value report statement - here management accounting techniques evinced a change in the reporting of value, company-wide.

During the first round of interviews the senior manager discussed the role of metrics in relation to their annually published Value Report. Issued as a supplement to their financial statements, the value report shows the segmental returns and revenues across a range of business divisions including, but not limited to, cost of capital, NPV of investment projects, value of life insurance segments, as well as a number of associated investment and holding activities. The purpose of the value report is to demonstrate how value is generated and stored within the organisation, with an underlying aspect of investor communication: "it's about saying to investors, look - we have this amount tied up in future projects and we expect [this level of return]..." (SAM, Aug 2008).

In addition to those areas, the report also contains measures and disclosures on the value of new business, areas and sources of internal value generation, and a narrative section which reports this stating which markets were most valuable in the trading period, where expansion is likely to occur, and a brief assessment of results to date. In short, the narrative of the value report operates in much the same way as narrative components in an entity's financial statements. As a necessary component in these measures, CLV metrics are included and disclosed and changes across time are analysed and cross-referenced with market data and performance. Overall the main aim is to give a sense of how value is embedded within the processes of the EquiGrow and to disseminate a wider notion of value; that market values are included alongside internally tracked measures of value creation indicates a measure of value that transcends market performance, trends and estimates.

During the second interview stage, the senior manager stressed that the use and range of metrics shown in the report had increased and that pagination had also grown. To that end, it was felt that communication of value growth within the organisation was currently not reflected in market information, such that owing to the current crisis and credit crunch the senior managers and parent board displayed a lack of faith in market trends and generated analysis. On this point, an accountant captures this uncertainty over external valuation:

"I don't trust it right now, I really don't! Shares are being juggled and sold based on whatever story breaks on Sky, and prices are total mental! I'm not sure if [EquiGrow's share price] will be higher or lower at the end of each day... I'm thinking about starting up a bet with everyone here, 'Higher or Lower: when will we be told we've hit the shit?'" (A2, Sep 2009)

Consequently, there was a greater preoccupation with external measures and indeed a heavier leaning towards the production and publication of the value report. The value report became integral to senior management's recovery plan, so as to track sources or processes where value was lost and to then implement objectives aimed at recovering lost value, and to designate areas of potential inefficiency.

The joint unrolling of upgraded IT systems and VCMA can also be argued as driving collaboration. To elaborate; aspects of increased departmental collaboration are evident within this case, in that the senior accountants and marketers met several times to discuss and deliver customer management strategies including protracted forms of CRM, which arose out of an opportunity to use the increased amount of customer data generated and collected by the new IT system that was to be implemented alongside the updated customer valuation metrics.

The IT systems upgrade necessary to accommodate the internal CLV calculation and related customer management procedures were seen to cause further problems than unfamiliarity. For instance it served as a source of tensions between financial analysts and processors owing to changes in the valuation system, and some initial glitches. The change in valuation model led to changes in the final valuation attributed to some customers. In some cases, previously lucrative customers were now identified, under the new model, as "poorer" or in the context of CRM, "undesirable", causing some problems with the targets of financial analysts. As part of the MAS in operation, senior management encouraged the adoption of employee targets and weekly reviews, which meant that processors were encouraged to complete a certain amount of cases per week, and that financial analysts and policy sellers were required to maintain a specified level of customer income. Owing to the change in model, some sellers and analysts were not meeting targets because of this apparent shift in their customer's and customer portfolio profitability/value, and they blamed the processors:

"They're doing it so they can meet their targets" (FA2, Aug 2009) was a common claim, coupled with one response from a seller who felt "the system change means that all of our work and targets are more difficult to complete" and who further declared that the processors "don't really understand the new system so they're rushing claims to meet their weekly targets… and because of this [rushing] they're leaving out some important details that changes the [customer value]" (FA1, Aug 2009).

Furthermore, tensions were also increased as HR policies became questioned as the tensions and initial system problems led to some processors lodging complaints. As a result, quality procedures were intensified, highlighting that management felt that a focus on quality would solve the problems of tension, implicitly placing a great reliance upon accounting measures to drive performance, or to even manage and organise employees. To be sure, review interviews at the second visit demonstrated increased tension, as sellers and analysts were getting their bonuses but processors were not, despite embarking on job sharing initiatives. In these cases the HR policies and targets were set through the management scoreboard system and, it can be argued that VCMA exacerbated labour tensions.

Change in daily routines and in workloads was also driven by the collaboration between HR and accounting in setting targets. During the second interview stage, a customer services employee noted that the targets increased in scope over time, and that these new targets also drove heightened instances of team work:

"Targets are set for each team, 'cos of the way the cases are split everyone on the team has to meet [a percentage] of that target. The more targets are met, the better your team is" (CS2, Sep 2009).

The underlying logic of the process stems from HR management:

"If a case load target is set for every team, and only for teams, we give the leader a chance to do their job and organise members[...] [team leaders] know their team better than I do and ever will, so they'll judge who can do what in the timeframe we've given them. [It is possible to] monitor efficiency levels in each team, and see who [in individual terms] is performing well and who isn't. I mean, the team as a whole is measured on case completion and closure, so a team that meets all of its targets are doing well, but this measure includes [free riders] who are basically just doing the bare minimum [and in an individual basis] might not even be meeting percentage loads, so these guys 'have it easy' and mess with team efficiency, because without [free riders], the team would potentially be more efficient and deal with a greater case load" (HR Sep 2009).

Here, the reliance upon accounting to co-ordinate workloads and devolution of work responsibility indicates that VCMA was also used to assist in HR management practices, encouraging a more hands-off approach of management at the top level. Simultaneously, this leads to more self-organisation of employees at the lower levels, privileging the role of VCMA in driving and setting targets. A sense of goal orientation also emerges, whereby VCMA is implicated in not only setting targets for recovery at the top levels, but also in monitoring and communicating them at lower levels of the organisational hierarchy: daily routines over the two rounds of interviews become altered to the point that organisational practices are increasingly outcome based, where outcomes are defined by VCMA and the strategic orientation of value creation and reducing inefficiency. Thus VCMA emerges as crucial to EquiGrow in uncovering and maintaining sources of efficiency gains by encouraging greater employee involvement in the monitoring process, which also has the effect of altering organisational practices. VCMA is also observed to stimulate a shift in organisational practices towards increased departmental cooperation. These issues will be addressed in more detail in Chapter 7 where accreted observations across both case organisations are analysed. The following chapter discusses findings from SSI.

Chapter 6: Practical Context of Value Creation: System Solutions Integrated

6.1 Company Background: Context of value creation

System Solutions Integrated (SSI) is a UK subsidiary of a US parent company based in the computing industry manufacturing hardware, software and providing IT solutions to UK and EU companies. The geographical neighbours of the parent headquarters are also their chief market competitors. The fortunes of SSI have mirrored, to some extent, the failures and success of these competitors and the IT industry as a whole, in that the performance of SSI and competitors have been greatly affected by the dotcom bubble of the late 1990s. The dotcom bubble refers to the financial market bubble of internet based companies and retailers which emerged during 1995 and contained heightened market and equity values of those companies operating within the IT and internet sector. SSI, during this period, witnessed a dramatic rise in share prices, increased share trading in the market, and significant growths in both their domestic and international customer bases. Similar phenomena was experienced by SSI's competitors and the bubble also culminated in the inception of several internet based retailing companies providing heightened instances of competition within the industry and for SSI. At the same time the industry itself was rapidly changing as huge cash reserves resulting from the massive industry growth meant that companies were able to invest rather heavily in research and development activities. The bubble altered the industry infrastructure to such an extent that upon its collapse in 2000, several high profile bankruptcy cases were launched, such as Worldcom[6], and NorthPoint Communications.

In the aftermath of the dotcom bubble, SSI experienced a sharp decline in financial performance, which was speculated to have been caused by a large gap in sales volume estimates as a result of industry contractions (SAM, Jul 2009), meaning that anticipated incomes were inadequate to cover actual costs and investment outlays: As SSI provided many of the dotcom start-up companies with hardware and integrated server and software solutions (ITM, Jul 2009), the collapse of the market led to an immediate decrease in sales. In terms of the company infrastructure, SSI embarked upon a series of cost reduction measures culminating in manufacturing staff lay-offs, executive pay-offs and increased outsourcing initiatives. SSI around this period also intensified

[6] However, Worldcom was also complicit in engaging in fraudulent financial reporting and accounting activities.

software R&D activities which also saw the introduction of IC monitoring and reporting metrics into their management accounting systems, and in 2004 SSI launched a range of server products based on a range of software as a service initiatives, which also coincided with an upturn in financial performance. The 'software as a service' refers to 'software on demand' services, similar to video and music on demand services offered online, where users can use SSI developed and patented software subject to either an agreed or ongoing subscription period, or on a 'pay as you go' basis.

6.2 On The Management Accounting System

Given the heavy emphasis on manufacturing and the repetitive nature of their business operations, SSI has utilised standard costing (SC) as their primary method of inventory cost management. The problem with standard costing for SSI, however, is that with the manufacturing department producing many different products and hardware component parts, an equal number of cost variances are produced, giving the need to analyse variances which equates to numerous reports. But whilst SC can be used for effective cost control in SSI, it is becoming increasingly problematic to manage, and the widespread use in the accounting department is creating "boredom" amongst employees. The insistent use of SC is also linked to their MAS, which has been unchanged since the dotcom bubble, with slight recent changes to focus more on IC reporting for the purposes of better managing and monitoring software, R&D and patents, as well as aspects of value chain management; these aspects are covered later in the chapter.

Cost control is predominantly through SC in SSI, but has been extended to include aspects of value chain accounting and supply chain management – as part of a supplier scorecard management system, the company produces "vendor health checks", which are used in a similar manner as aspects of a balanced scorecard system – using a range of performance measurements which include both financial and non-financial aspects and targets. This concentration on non-financial targets represents a shift in focus from TMA to VCMA as changes in measurement bases has entailed a new form of data collection which is primarily done in real-time through information gathered both internally and externally, as opposed to the previous forms of data collection which, for analysis purposes, used historical data gathered internally – the knock on effect of this in the empirical domain, or the daily practices and routines of accountants, has meant that new data is collected from different sources and the role of management accountants has moved from data analysis and report production to actually personally collecting that information, instead of using information that is collected by the MAS.

As a result of losing market value, the board of SSI's parent decided to implement forms of IC monitoring to try and understand the nature of IC and related intellectual assets more, including developing and using metrics to capture employee know-how, and linking IC concerns investment decisions through analysing the impact of potential decisions upon shareholder value - to be sure, this was seen by the Senior Accounts Manager as the primary concern of the parent board.

The decision on shifting focus toward IC required more work at SSI as the general feeling was that nobody internally had any great knowledge or explicit cognition of what IC is, which meant "attending various professional courses and one-day workshops, as well as some lectures… organised by professional bodies" (A2, Aug 2009), in additional to academic talks. At first, this shift in focus to IC meant more training for senior level employees, so at the top level, senior accountants with differing levels of exposure to IC were required to attend these lectures. In a critical realist sense, the main structure of change resulting from this focus on IC related to measurement; implementation of IC as a form of delivering shareholder value necessitated an organisational awareness, and greater knowledge, of what was to be measured under the new metrics, so a large change in daily routines was required initially, ranging from attendance to the IC specific sessions and training relating to how information should be recorded in line with metrics. These endeavours were perhaps not as fruitful as expected and were met with some resistance, as some senior level employees and managers felt that the IC seminars were "rubbish", "boring" and they left with less clarity as "the terminology was too confusing", and in the most extreme cases "the ideas were a bit controversial… how can we measure employees worth if we can't put it on the balance sheet?" (A3, Aug 2009). A deeper notion of change was driven here by the adoption of IC metrics, in that employees' engagement with practices of organisational resistance was also altered. A series of anecdotes was proffered by one accountant (A5, Aug 2009) who detailed how terminology was subverted to negate the ideology and purpose of IC metrics.

As noted, the decision towards implementation was made with the hope that a better understanding of IC and intellectual assets would lead to a greater awareness of the value attached to IC and could reveal ways in which SSI were losing market value, because directors at the parent company assumed that market value was tied to their intellectual assets, and that by trying to attach an accounting value to the range of such assets that SSI could potentially realise gains in shareholder value. Interviews with senior employees revealed also that implementation was driven by a desire to better compete in the market, with the strong assumption that successful IC implementation might also hint at some institutional factors - specifically, to probe whether competitors market value increased as a result of adopting a particular technique or set of techniques. This desire for a greater competitive position was not driven solely by value creation strategies, but to a prevention of further value loss in the short term. Explicit in this assumption is that adoption would possibly lead to an eventual position of value creation in future trading periods.

SCM places a great emphasis on Porter’s notion of strategic positioning, which entails the utilisation of a value chain perspective in SCM which requires SSI to recognise their products in the total value-creating chain of activities, consequently SSI have developed MAS that enables improved internal cost control and performance (primarily adapted their existing TMA influence SC system) and also to focus on interactions with their suppliers (through Vendor Health Checks and Supplier Scorecard forms of performance measurement).

6.2.2: On Supplier Scorecard System

The supplier scorecard in use at SSI was designed to provide an overview of supplier performance in relation to a number of specific areas. For instance, information and targets relating to cost savings are included and tracked internally, where actual performance, or cost savings, is compared to a range of target cost reductions for the period. The supplier scorecard system is based on the idea of a balanced scorecard, but focuses on suppliers, with the explicit aim of measuring, analysing and monitoring supplier performance in a number of areas, and a corresponding list of measures are provided in table 6.1. SSI investigated their company value chain and industry value chain and found that the largest potential for cost savings in their value chain derives from links to suppliers. The logic behind tracking cost savings stems from the desire to reduce costs along their company value chain – “if a supplier is not delivering parts on a cost-effective basis, then we look for other suppliers who can” (A2, Aug 2009).

In addition to this, SSI conducts vendor health checks to focus on which suppliers are not adding value to their company, typically areas where money is lost and inefficiency in delivery is high. To that end, the logic of adoption is a concern of efficiency and to prevent further value destruction.

Category	Metrics/Measures
Cost	Includes: Cost reduction measures % of cost reduction measures Annual cost changes Gains/losses on cost changes
CSR	Wide assessment of CSR disclosures: Safety initiatives Overall health & safety record Breaches of H&S Carbon footprint Green/Environmental initiatives
Delivery	Includes measures of delivery rates and times, not limited to the following: Average delivery time % of early delivery % of late delivery Quoted lead times vs. actual
Responsiveness	Assessment of overall communication:

	Orders received as % of orders placed Emergency orders received as % of orders placed Payment rates, inc. settlement terms and ratios
Risk	Includes VHC, encompassing measures: of financial stability Industry capacity Industry/systematic risk Pace of technological change Product availability

Table 6.1: Indicative scorecard measures[7]; source: list collated from a mixture of interview data and case material.

An SSI Vendor Health Check (VHC) involves calculating a range of both financial and non-financial performance measures against all the suppliers and is part of a quarterly period cycle review of supplier performance over the past three quarters. These performance measures check suppliers' general financial and market performance against competitors' performance, for example[8] a detailed share price analysis is conducted for the previous quarter and compared to the industry benchmark, any failings are flagged on the system to be investigated as a potential sign of inefficiency, and if the supplier does not improve performance in the next quarter then alternative suppliers are looked for. This assessment of financial performance is also tied to analysis of any cost savings received over the period. Again, if no cost savings are incurred, the supplier is flagged for review at next quarter end, and given that quarter to improve performance – if none, then another supplier is sought.

Included under VHC as part of supplier financial performance measurement are indicators on: cash burn, based on quarter 1 results, SSI estimates the amount of cash

[7] Sensitive or SSI-specific measures, ie those developed internally, have been ignored from analysis here so as to preserve anonymity
[8] This example is based on one that I was shown by an accountant at SSI (A3, Aug 2009)

that a supplier would use throughout the financial year; quick ratio, or acid test ratio, to examine a supplier's liquidity and how much near cash asset cover a supplier has over current liabilities, such that the ability of a supplier to meet obligations using liquid assets is assessed; current ratio to evaluate the ability that a supplier has to readily turn current assets into cash in order to meet short term debts or current liabilities in the financial period; and an Altman Z-score, coupled with cash burn tests, in order to forecast the likelihood of a supplier entering into bankruptcy within a two year period.

However, experiences in using these financial measures were mixed. Interviewees pointed to problems using the Altman Z on some suppliers. In addition, one accountant expressed the following:

"Some of our suppliers rely heavily on operational leases so there are concerns over the accuracy of their balance sheet because of this reliance on off-balance sheet items [such as an operational lease]

Interviewer: what have you done in these instances?

Respondent: I've tried other financial tests that use market data, but I sort of got nowhere... share prices change rapidly... with announcements, for example, and any predictions on the system were messed about by changes in share price" (A1, Aug 2009)

The reasons for such difficulty were stated to be related to the causal effect that fluctuations in share price can have upon increasing or decreasing the value of assets accordingly. For example the model used equates share price volatility with asset value volatility and predicts the likelihood of bankruptcy when firm asset value falls below firm liability value, such that if share prices fall over a period there is increased impact upon asset value and consequently a greater risk of bankruptcy. Equally, any positive fluctuations can decrease the probability of bankruptcy. On this point, the same accountant noted some underlying unreliability to using widespread financial measures:

"It got to the point that cashburn figures said one thing, but our default or bankruptcy calculations were telling us that the supplier was in good financial health" (A1, Aug 2009).

This suggests that there was some degree of incommensurability between these calculations, which hindered the efficacy of financial performance measures, and the senior accountant stated a need for more non-financial KPIs. To that end, some were introduced over a period of months and other key performance measurements were used, including a range of non-financial indicators, such as mobilising delivery times as a key health indicator, so that health was not solely based upon cost savings and share information. However, decisions were often made on the basis of a mixture of both financial and non-financial factors, “if the majority of these indicators are poor then we recommend to [senior accountant] that we change supplier” (A3, Aug 2009).

Despite this increase in NFI, decisions to change supplier were still heavily linked to monetary concerns. The accountants noted that initially, SSI were “losing a lot of money on deliveries because of our ordering system and our suppliers’ logistics, so naturally we shopped around a lot at first” (A1, Aug 2009). Indeed, it seemed that decisions to change were also stressed in financial terms, but the practice of switching was seen to be quite rare:

“But we rarely do it now – we’ve found that particular suppliers will go through a seasonal sticky patch, which is reflected by a poor quarterly performance review, and their health indicators show this. So we keep an eye on that supplier for the next review and find that the indicators are good because the previous quarter’s poor results are offset by better performance this quarter” (A4, Aug 2009).

Furthermore, SSI utilise CSR information into the supplier scorecard system. The idea was first introduced in 1995, when environmental staff decided to focus on the environmental aspects of their products. The US parent of the group have used environmental health checks of suppliers since around 2000, but the use of such CSR performance measurement is applied on a narrow basis in the UK branches. An example of its use was described by one accountant who compared local investment rates in resources to evaluate the extent to which vendors were investing in their local communities (as tied this CSR objectives), as trends from 2006-2007 demonstrated that most of their suppliers were investing more in local resources. When asked about the wider concerns of social performance, the same accountant recognised a narrow importance of CSR performance within the company, noting that initiatives are “only valuable if it is visible to customers that the supplier is environmentally conscious” (A4, Aug 2009).

From this it seems that there is a limited concern over the wider non-financial performance of suppliers, which focuses on notions of social performance. Despite this limited focus on, primarily, social aspects, there is a desire to do more; one interviewee (A5, Aug 2009) claiming that it is "important" to highlight social and environmental issues of supplier performance, as particularly poor performance "might reflect badly on us". The senior accountant (SAM, Jul 2009) acknowledged that whilst such CSR performance measures are "important and necessary", that there was "no such greening of the value chain" when compared to other companies and competitors that he mentioned, claiming that the full vendor review system was planned to include a wider range of CSR measures, but upon implementation the main focus was on transaction volumes and monetary concerns. Upon being prompted, the senior accountant claimed this was due to the lack of wider focus upon implementation, which was not driven by financial pressures or by the so-called credit crunch.

Instead, these indicated that the drive to implementation was because of the purported success of other companies with supplier scorecard systems, thus implementation of supplier scorecards driven by their own value chain analysis and institutional factors, in this case isomorphism. Owing to this, there were high initial expectations, as evidenced by shifting suppliers rapidly during initial phases of implementation, but because of the initial high supplier shifts, several problems were encountered with their supplier scorecards. In addition, there was some disagreement as to how results of the tests should be properly interpreted. As a result, it was felt that such issues could be remedied by addressing specific company issues and altering the scorecard measures accordingly.

Furthermore, there was a department-wide feeling amongst senior employees and top managers that the scorecard system in place was "too similar to competitors" (A2, Aug 2009) and it was felt that they "were copying what everyone was else doing without thinking about how it met [our] goals and objectives" (*Ibid.*). In a sense the company implemented the scorecard system without little alterations, which the senior accountant feels was due to pressures from the US parent to "rush through" adoption. He further explains:

“[I]t was hoped that any teething problems would be sorted out when the scorecard became embedded in our own nervous system, because we knew that some of the KPIs meant changing how we use parts of our database… and that these problems would be easily identified when we didn’t have enough existing data, for example, to carry our supplier cashburn rates. In these cases, we knew that we would have to change our own accounting system so we could gather (supplier cash figures) more easily, rather than spending hours trawling through annual reports, published updates on the website” (SA, Aug 2009).

As a consequence it was readily acknowledged that a change in KPIs being used for performance measurement purposes necessitated a change in the existing accounting system, suggesting that measurement acted as a generative mechanism of change, and such change manifested in the daily work routines of accountants. One interviewee explains:

“As a team we would look at specific aspects of the supplier scorecard and each member of the team would then be responsible for getting the information before we calculated the performance indicators.

Interviewer: Would that mean delegation of specific KPIs?

Respondent: Yeah, for the cashburn, it would be using information put up on the supplier’s website, and as (the senior accountant) said we would spend a lot of time trying to find what we needed” (A4, Aug 2009).

During this phase accountants were diverted from their normal tasks meaning that the completion of financial reports and productivity analysis, for example, was set back. So daily routines altered and the system was slightly altered as the server space was increased so that supplier information could be stored.

Work routines were also altered in a wider sense, because accountants were aiming to develop their own measures, as separate and distinct from those driven by the US parent. Consequently meetings were held to the effect of seeking and developing better measures for their suppliers. Stemming from this was a stated desire for increased NFI, “there would be a greater reliance on non-financial information and measures” (A6, Aug 2009). Interestingly, the senior accountant considered that better measures related to those of a more narrative nature, citing that “supplier management is not just about numbers" (SA, Aug 2009). For him effective supplier management and related health checks entailed more than a range of financial targets:

"Satisfaction can be measured, but it's difficult to quantify. I can say I'm completely happy, but if someone asks me how happy I am, I can't give them a number or any sort of indication they can find useful" (*Ibid.*)

Ultimately within SSI there is a sense of a sort of impotency regarding supplier scorecards because they are not fully actionable; they act as a range of metrics and performance indicators and encourage management of suppliers based on a range of, primarily, financial reasons. What appears to be missing from scorecard metrics is an indication of what is central to poor internal performance, in that root causes of much value destruction may relate more explicitly to poor inventory management which would be reflected in the supplier measures of cost savings – however in operating at overcapacity the organisation might be losing value as they are producing too much goods and increased overheads and inefficiency might stem from within the organisation. What supplier indicators might show in this instance is that cost savings are not relatively beneficial, and the scorecard might not indicate that an organisation might be offsetting potential cost savings by ordering too many materials from the supplier which lay dormant because of over production. In this regard, it seems that any links to cost savings might be linked to gains or losses in other areas of the supply or industry chain. This leads me to conclude that supplier scorecards were used to effectively manage suppliers, as opposed to supplier costs. The drive to include more NFI measures would further suggest that the process is to deepen management to include a range of non-financial factors. At the time of concluding the first round of interviews, SSI accountants were generally unhappy with the range of KPIs and were actively seeking to change them again to fit with an overall strategy tailored to value creation, as opposed to one that essentially "stops the rot" (A6, Aug 2009) of continuous value destruction.

Similar to vendor health checks, the company also looks at levels of vendor sales. In this scenario, a member of the costing team, or finance department and accounting function looks at suppliers and checks to see if material hardware components are available at a lower cost from other suppliers. The company buys in almost finished components which they attach to part completed systems and servers, stemming from their emphasis on external manufacturing, which is “pretty much outsourcing” (A3, Aug 2009).

Due to the separation of inventory and invoicing systems, the process is necessary, as it acts as a mechanism for examining purchase price variances, which compares the cost of a component when ordered against the internal standard cost. The checks are done manually by matching inventory transactions against raised invoices to make sure that transactions have been invoiced. Where significant variances arise, alternative market prices are sought for particular components and the cheaper suppliers, if identified, are recommended. In this sense, whilst not completely falling under the vendor health checks, sales checks are largely used as a form of supplier management, where the emphasis is recognised by the senior accountant as “trying to find cost savings along the value chain” (SAM, Jul 2009), which he later identified as part of a broad set of supplier management measures which also includes aspects of the supplier scorecard system.

Initially, the process was only used on a small number of parts, but recently, perhaps due to the credit crunch and UK recession, the vendor sales process has been extended to include all parts that are used in external manufacturing. It is not clear whether the extension of focus was due in part to these factors or not as any interviewee could not clarify why the vendor sales checking was expanded to include all components. Additionally the senior accountant pointed to colleagues in the US as the main driver to expansion.

The effects of this process on workers is noticeable, with one claiming that it has “grown into a monster” (A4, Aug 2009) after revealing that the checks have become an 8 hour task.

Hence, as form of VCMA, supplier management concerns the search for efficiencies and cost savings through the comparison of standard costs versus actual costs. It involves the use of existing standard cost information that the company maintains, and complements traditional cost accounting practices by extending the focus to supplier management. In a practical context then, this particular practice merely augments TMA by enhancing its traditional internal focus to consider external information, and aligns a strategic focus to suppliers by means of a comparison of existing internal SC data to external market and supplier prices to uncover variances, where in a similar fashion to budgetary control and organisational control using standard costing, any deviations are investigated and managed away.

6.2.3: Value creation and organisational awareness

The marketing manager spoke of his desire to integrate operations within the UK branch:

"Not only would it cut some costs, but it could lead to increased synergies… for example most of the customer data is being used by the marketing department [for the development of promotional strategies], but some is also used by the finance team" (MM, Sep 2009).

Furthermore, the marketing manager held a series of seminars aimed at promoting company-wide awareness of value marketing, in anticipation of implementing his own ideas based on the concept. Unfortunately, the seminars were not attended well, suggesting that while the links and potential gains to be made from cooperation were identified by senior level managers, employees in lower levels and other areas of the company were either uninterested or unaware of the possible benefits. When questioned about the seminars, some accountants felt that learning about a new concept might mean an increase in workload, and viewed any mooting of potential company benefits as an "excuse to get us to do more", while two management accountants in particular debased the idea of cooperation by claiming that information is used for different purposes, in a sense of recycling accounting data for marketing purposes.

As part of the personal development plan (PDP) used in SSI[9], by all business related staff, there are recommendations for particular staff members to transfer to work on projects to enhance their overall business knowledge. For instance, a management accountant in the costing section of the company was given project work to be conducted alongside her own responsibilities as a cost accountant, where the project task involved working with people from finance, tax, marketing and IT. It was hoped that by working on this project she would gain "a better knowledge of how the company works" (A4, Aug 2009); a sentiment also expressed by a senior manager who felt that the initiative of project work would "break the routine… of everyday work by giving everyone something different to think about" (HR, Jul 2009), where the underlying

[9] This is addressed later in this chapter

logic is to “bring something different to the table” (*Ibid.*). In other words, managers hoped that by integrating staff from different departments on common projects, there would be a generation of ideas that would not be rooted in one particular area of the business, in that costing employees might emphasise effects of a mooted decision upon product costs, whilst inventory staff might encounter problems because of a particular decision, entrenching an organisation wide awareness of pursuing a value strategy.

By focusing on the business as a whole, the inclusion of staff from other areas was expected to “bring synergies between departments” and by tying the project objectives to PDPs and Performance Maps, to broaden individualistic knowledge of specific areas of the company that some employees might not encounter on a daily basis, or otherwise be aware of.

Furthermore, another reason offered by the senior accountant for the increased scope of departmental coordination alongside an explicit objective of value creation is to exploit inter dependencies upon organisational intangible resources, such that strategic objectives and departmental processes can be linked to the use of resources, specifically the knowledge or “job know-how of employees in other departments” (HR, Jul 2009), for example customers with marketing and accounting departments using the same customer data. In this process, value is created for the organisation when departments share value drivers, in this case repeat acquisition through customer loyalty, and through the minimisation of process times efficiencies can be gained by exploiting the joint strategic need or use of the same organisational resource, in this case customer databases. Consequently, the value within customer value, in this case, relates to shareholder value and not customer value, as job process efficiencies emphasise cost savings within the organisation which in turn creates more monetary value for shareholders, particularly as the price of the customer order remained the same with, for want of a better term, increased job sharing. The strategy here of value creation acts as a generative mechanism, in that changes are made to daily work practices, as well as changes to the accounting systems owing for the need to allow dual-departmental access.

6.2.4: Performance measurement

SSI has two main means of maintaining and measuring employee performance standards. Firstly they use performance maps so that targets and objectives are mapped in line with overall strategy, and secondly a personal development plan for employees that places them within the overall direction of the company as the document is planned to fit core company values with those of the employee when linked to a value creation strategy.

The performance map, in use at SSI, has an integrated element of performance analysis and appraisal; these HR performance measures can be seen to further ingrain awareness of value creation and destruction. The main foci of the PDP are to track and develop achievements, so as to identify areas for potential improvement. The stated wisdom in such a task is to stimulate a consciousness within employees that allows them to visualise their role within the organisation and how their contributions, at specific times of any trading period, are linked to improvements or decreases in performance, where performance was stressed by the senior accountant as indicative of value growth.

Logic of implementing performance maps was identified by the senior accountant as a means of monitoring employee knowledge in terms of how it is used to augment processes and how improvements are causally linked to increased intangible value.

But most of the dialogue encountered during the research process related to the usage of performance maps in shaping employee's attitudes to work through encouraging reflection upon roles, behaviour and target achievement. Indeed, the senior account manager viewed maps, initially, as a mechanism to support the role of knowledge, skills and competences in pursuing their strategy of value creation through halting the decline of value loss. Specifically that knowledge can be improved over time and softer benefits of this relate to improved task handling, shorter or reduced task completion times, and so on, so that efficiency is stressed as an invariable outcome of prolonged usage of these maps, at least on an individual and, ergo, collective basis, assuming that individual efficiency gains would aggregate to organisational-wide gains and thus lead to an increase, in the long term, of profits and growth. Discourse around this point, unfortunately, was not stressed by accountants during the first round of interviews, perhaps indicating that as a strategy or rationale for implementation that it had not yet affected daily work routines and practices. Or at least there was no such link noticed by employees. Under a critical realist framework, this could be interpreted as the stated strategy remaining within the background of the organisation and not quite coming to fruition. However, employees did notice shifts in their daily work routine as a result of widespread encouragement to follow maps and PDPs, but these shifts were viewed more cynically, as noted below. Perhaps this indicates that the strategic purpose of maps use was inverted by employees, giving rise to ideas that agency is completely not shaped by practices or institutionalised rules and routines, but, at least, it might indicate that organisational resistance is shaped by them.

For employees, the performance map is seen as an invasive procedure, as some have commented that preparing documents "takes so long", as well as aiming more specific criticism towards the performance maps:

"How are we supposed to remember what we've done in the last year? These maps are supposed to help us review our performance in the last 12 months, but by this point it all becomes a blur" (A4, Aug 2009).

When questioned about this, employees recalled that they were urged to maintain a journal of their performance on a weekly basis, felt to be invasive, and taking up too much time – this invasiveness represents an actual change in the domain of experience, such that new work routines are needed in order to prepare the journals and maps of performance. Subsequently, there is a sense of altering processes and routines along resistance. There was also a feeling amongst accountants that a performance map might create new expectations of management, so in apprehension of this possibility, employees tended to understate achievements and performances so as to avoid lofty targets being set.

However this resistance to performance maps has not hindered their wider implementation, as both the senior accountant and HR manager are aware of the resistance to completing performance maps, noting honestly:

"I know [that employees] do that to try to minimise the stretching effect of any proposed goals" (HR, Jul 2009)

But both also consider that they are vital in monitoring the success of departmental objectives, as the maps act as a visual aid to assessing the success of strategic focus, in that they can identify performance gaps between stated objectives and those actually achieved. Critical to this are performance metrics on productivity and internal processes where resource utilisation is of central importance. Another dimension of the performance maps identified by the HR manager is that of motivation, in that a series of KPIs measured satisfaction. Here, employees were sought to increase productivity through continuous learning and being more aware of weaknesses within internal processes.

The specific emphasis placed upon performance maps by the senior accountant is to create targets for individuals involved in each aspect of the business, where the overarching aim is to “develop a plan for the business that guarantees a good level of service provision” (SAM, Jul 2009).

Explicit in this statement are assumed causal linkages between intra-department performance and organisation performance, such that, the collective organisation will benefit from clear targets and expectations being set for each department, and if each department achieve such targets, the organisation as a whole will benefit.

As noted, the senior accountant was aware of an initial resistance to performance maps and a reward scheme was implemented alongside performance maps as an incentive for employees, where a bonus is awarded on successful completion of agreed targets. However, employees also resisted this as rewards of being identified as a ‘star performer’ felt too cringe worthy: “It’s like something from my daughter’s primary school” (A1, Aug 2009).

6.2.5: Interpretations of implementation

Changes have been linked to the overall strategy of the organisation, as the senior managers expressed a desire to increase financial growth and market share, in addition to having a more explicit intellectual capital management system in place.

In their existing management control system, SC is of vital importance, as standard costs are used as a basis for resource monitoring, supplier management and for organisational control. Conceptualising measurement as a mechanism of change has revealed that the company’s MCS has not been impacted upon by the implementation of VCMA practices because of the reliance on the traditional measures and practices of standard costs. Instead, the company has adapted elements of VCMA practices and techniques to match their system and to link them into the SC system. This is most evident in the supplier scorecard and quality management practices, in that supplier’s prices are mapped against price variances in order to identify potential cost savings along the value chain; if one supplier has introduced a price rise compared to the expected price determined through variance analysis, the accountants can recommend a supplier switch.

With regards to supplier management processes, VCMA seems to have been adopted in order to identify performance areas of efficiency and inefficiency, and where inefficiencies exist they are incorporated into the broader management control system to be effectively managed or traded away. Some HR management processes, however, are part of a wider system that examines where value is being added or compromised in organisational and manufacturing processes. By examining intellectual capital through maps or PDPs, for example, managers are able to trace which processes or group of employees might require more direction or supervision towards meeting stated aims.

The company have also outsourced all of their manufacturing operations, to such an extent that, the company buy in parts for their servers from suppliers, in order to construct the servers and hardware that they manufacture –logically it seems that job restructuring is in place here to maximise short term gains, as resource allocation and cost savings are taking place via job restructuring. VCMA here might emphasise a logic perhaps more closely linked to NCE's stress on marginalism: lowering short run labour costs in order to maximise short run profits, could be related to a strategy centred on boosting short term performance. Although the managerial and board-level emphasis is upon long term creation of value for the shareholder, perhaps in the short term value creation through cost savings, cost efficiencies and process efficiencies is actualised at the expense of long term goals. However, there is no guarantee that both the short term strategic realisation and long term strategic objectives should be mutually exclusive. Indeed, it would seem that many traditional ideas are used alongside more novel tools stemming from VCMA.

6.3: The effects of Value Creation: second interview stage

Upon returning in 2010 it seemed that heavy emphasis was placed on efficiency and the crisis. Indeed the notion of increasing short term performance was further linked to improving efficiency. In addition value creation was linked explicitly by senior managers (SAM, Apr 2010; HR, Apr, 2010; MM, Apr, 2010) to shareholder value and to share price movements. In essence, the rhetoric over recovery estimates and market values were entrenched in senior-level dialogue. It is unclear whether this was as a result of parent-level intervention or SSI management, but what does become clear is a greater reliance on VCMA as driving recovery.

Consequently, senior discourse at SSI revealed two important generative mechanisms of change emerge: recovery and the crisis. This was also evident from the accountants at SSI who each noted how the crisis has increased their reliance upon supplier management, and indeed how the role of supplier management had widened in the department, but not in terms of metrics and measures being used, particularly because CSR measures had been largely abandoned in favour of risk management and increased non-financial indicators of performance.

On the crisis, two senior managers noted effects and situated SSI in relation to competitors:

“It seems as though the crisis has hit us the hardest” (SAM, Apr, 2010);

“We feel exposed in the global market because we don’t have the same brand power [that our competitors have]… we are pessimistic in our forecasts of recovery” (MM, Apr 2010).

This framing was used by both the senior accounts manager and the marketing manager in providing some logic and justification for introducing changes to measures in operational use, in that SSI’s position was not unique, but the changed measures were used to strengthen SSI’s market position. Cynically, this could be viewed as squeezing more value from customers and employees and suppliers - greening of the value chain has been forgone at the expense of financial recovery and the primacy of shareholders’ wealth.

Value creation strategies were still slightly limited, especially in the context of financial crisis, particularly as PDP measures and performance maps were increasing set up towards finding and exploiting efficiencies and to create value and wealth for shareholders. Indeed there was a heavy pre-occupation with share and market information. The financial effects of the crisis were analysed by the senior accountant in the language of market and share price information, and elaborated that there were noticeable effects on the company’s EPS and ROE, as both fell below parent company estimates:

“[as a subsidiary we have] tried some damage limitation, but across the board our ROE fell below our estimates of 9% to 7% by the end of June 2009… this was due, in part, to reductions in income”

“The basic EPS is $0.50 compared to 0.54 last year, and diluted measures are $0.49 per common share compared to $0.52 in the previous period” (SAM, Apr 2010).

As a result of the crisis, the senior accountant discussed a range of measures introduced in order to combat the value destroying effects upon shareholder value, intensifying the same rationale for implementation as noted above. Indeed, accountants in SSI also highlighted the increased instances of EPS monitoring, and a range of meetings were set weekly with the finance team to discuss these measures, as decisions were analysed, post-event, with reference to movements in EPS.

The senior accountant also seemed preoccupied during our second interview with financial forecasts and tools that would be considered part of the lexicon of financial accounting. He stressed the effects of the crisis upon cash flow statements and profit estimates, as well as noting the relative declines in asset pools. In the second interview, when I asked him to provide an overview of the main accounting shifts since we last met, he focused on these financial accounting aspects, mentioning:

“Operating cash flows have increased, but R&D expenditure has gradually been declining. Of course profits are volatile relative to our sales...” (SA, Apr, 2010)

This becomes interesting as during the first interview a similar question on the main accounting changes in recent periods was asked, and he discussed, at length, management accounting initiatives:

“We implemented the balanced scorecard a few years back and most of the developments have come from that really... we use supplier scorecards to bring the supplier closer to us and so the drivers of supplier performance become included into our own scorecard system... because of the adoption of the scorecard we use a range of non-financial measures too across the whole organisation, so in a way, I guess, our accounting has become less financial... we’re also linking performance measures to our knowledge management system” (SA, Jul 2009).

Aspects of risk management became further intertwined with the value chain. The supplier scorecards system attempts to measure supplier risk along the value chain through the use of z-scores on a more frequent basis. Analysis was also extended to cover movements in share prices of suppliers to reflect market confidence (A4, May 2010).

Further changes to the accounting measures used include a stronger emphasis on PDPs and performance maps, and an increase in outsourcing activities. SSI also experienced increased staff turnover.

The crisis, in a broad sense, altered attitudes and practices relating to the PDPs and performance maps. Maps were increasingly tied to visualisations of historic mapping of performance to industry trends and using a form of trend analysis in current periods to evaluate shifts in over- or under-performance (as compared to market movements in value and company worth). Productivity was therefore stressed in meetings and poor performance was questioned.

Concerning PDPs, SSI offered greater incentives and rewards for actively completing and filing reports. To be sure, incentives also became more frequent.

Linked to this was a sense of (re)stating key priorities in performance maps to ensure efficiency gains. Thus there is a strong temporal context to much of the accounting changes taking place that were explicitly linked to the crisis. On efficiency gains, the rationale was to "not waste time on analysis of any, sort of, redundant problems" (HR, Apr, 2010). By trying to drive performance with visualisation of patterns and trends, efficiency became synonymous with recovery as senior managers were aiming to create smarter employees, where smarter was mobilised:

"In a manner of speaking, it's about making us all more aware of the key problems we're facing. Representing these problems in figures or charts identifies them more easily[...] it's possible to take action to prevent trends and history repeating and we can speed up responses to any market moves against us and it can be done much quicker" (SAM, Apr, 2010).

Subsequently, efficiency meant focusing on key problems, which were linked to recovery and traced by market data and shifts in shareholder value.

The effects of these accounting changes upon the organisational routines can be linked to TMA, in that shifts were conceptualised through increased monitoring of processes and performances, which in turn encouraged within organisational participants an awareness of an accounting-driven monitoring. This heightened awareness also caused a virtual-spatial reordering of processes, as the increased use of softer metrics encouraged accountants to conduct ostensibly easier and quicker tasks first, so as to artificially inflate productivity reports and alter KPI outcomes. This resistance to change was born out of the axiomatic need to micro-manage particular tasks to use time more effectively and efficiently. Again, resistance to the PDP and to mapped performance seemed to stem from a distrust of being held to account for productivity. Some accountants felt that since incentives were being offered more frequently for completing PDPs and demonstrating productivity gains, then that created an opportunity to be punished for a lack of progress.

VCMA encouraged direct management of the value creation process, by bringing customers closer to the company through, in the words of the senior accountant "enhanced levels of customised products and dedicated after sales services". Suppliers are also brought closer to the organisation by means of supplier scorecard management. Thus, in a sense, VCMA for SSI operates in practice as an advanced form of SMA, in that it exhibits certain characteristics of SMA such as acting as providing a deeper focus upon performance measurement and a greater reliance upon non-financial information which becomes central to strategic goal setting.

Therefore the strategy of value creation can be seen as a generative mechanism of change within SSI, as the pursuit of the strategy instigated changes in the measurement and management bases of the accounting function. This, in turn, evinced similar changes in the forms and roles of management accounting techniques being used. These issues are now addressed, alongside similar observations at EquiGrow, in the following chapter.

Chapter 7: Cross-case analysis

7.1: Introduction

The case study method employed in this thesis was utilised to examine contemporary uses of value creation techniques within two separate contexts, with findings elaborated in the previous two chapters. The analysis presented in this chapter is devoted to an elucidation of the linkages and commonalities across both case studies; in terms of a critical realist framework, cross-case connections are sought between shifts in the domain of the empirical and the domain of the actual. Through this connection, a number of emergent themes are identified as recurring in both contexts, reflecting a commitment to a stream of empirical management accounting research whose aim is to provide an understanding of enduring concerns within practice. Both contexts point towards the centrality of accounting in supporting value creation strategies throughout the organisation as whole. These themes are consistent with the identification of a complex arrangement of intersections of accounting measures throughout numerous departments in the organisation; the role of accounting in delineating shared work spaces; the fluidity of what constitutes accounting practice; a wider use of non-financial measures which can be broadly associated with an extension of the underlying logic of traditional measures; and finally the fluidity of practice. In the following section, I highlight how VCMA has been generally used in both organisations before discussing each specific area separately.

7.1.2: Overview of VCMA

Whilst previous research has demonstrated that similar value creation techniques operate differently across different organisations (Malmi and Ikäheimo, 2003), the evidence in both case studies presents similar findings, in that VCMA techniques are used differently in both case organisations. For EquiGrow, VCMA practices contained explicit guidance on incentive compensation, recalling Ittner and Larcker’s (2001) discussion on VCMA as reflecting principles of VBM. In EquiGrow compensation was set at an agreed level of created value and, for analysts this was monitored using customer valuation techniques. However, no such concessions were made in SSI.

Given the diversity of usage of VCMA, there are ostensible similarities with regards to the management of value within both companies. The senior accountant at EquiGrow, during the initial interview period, identified an approach to managing shareholder value which involved elements of value creation, which is shown in figure 7.1.

In this model, value is based upon discounted cash flows and the creation of value is cyclical and dependent upon 6 key elements, those of strategic planning, value drivers, resource allocation, performance evaluation, incentive compensation and (investor) communication.

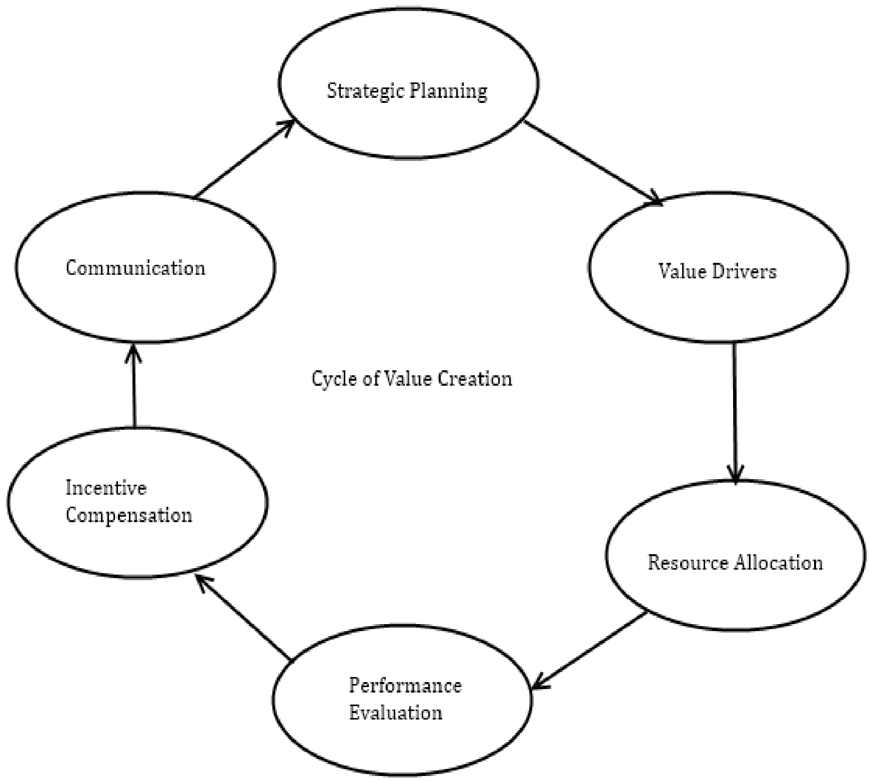

Figure 7.1: Elements of value creation in EquiGrow

Strategic planning involves the use of VCMA for performance evaluation purposes and includes, a range of measures relating to employees productivity, customer value, new business acquisition rates, which are all geared towards maximising the creation of value. Strategic objectives are set at board and senior levels and are filtered to employees through targets of expected performance.

Value drivers are those processes which are identified by employees, at all levels, as value adding. At EquiGrow customer services employees are encouraged to give feedback at daily meetings, where chief concerns, during the second interview stage, included a streamlining of processes to reduce process inefficiencies. Subsequently, some measures were taken to incorporate suggestions of reducing inefficiency and metrics were re-designed accordingly and codified within the value creation cycle as drivers of value. VCMA is implicated in this process through the identification of value drivers. Unfortunately, senior managers would not fully disclose their list of value drivers, but did indicate that sales growth rate, new business acquisition and incremental customer revenue were important measures. Consequently VCMA also provides the means to monitor the success in achieving strategic means through associated movements in value driver metrics.

VCMA is used strategically in order to plan as it links management accounting measures to the strategic orientation of the organisation; for instance there are clear instances of customer management where the onus is on accountants and senior accountants to plan how best to allocate resources in order to exploit strategic advantages in order to maximise, if possible, the creation of value and to improve performance of lagging customers. Since the crisis has widened there is also evidence of interfunctional cooperation between the accounting and marketing departments (discussed in section 5.3), and between the accounting and HR departments (discussed in section 6.2.3). This suggests a conscious approach or effort by both companies to align strategic advantages and behaviours of departments for goal congruence, and also to maximise the efforts of planning by using accounting and marketing data for effective customer management. Implicitly, the view from this position is that the customer base treated as a portfolio of value investment: VCMA, through CLV measurement, is used to identify (un)valuable customers and the resulting customer group and internal resources are allocated on that basis; as noted above the more valuable group is offered tailored financial services available at a premium, and un-valuable groups are offered less costly services as a means to potentially attract them into obtaining more services, subsequently transforming them from un-valuable to potentially valuable.

Performance evaluation involves a detailed review of targets, and VCMA is used to assess performance to date identifying areas where value has been created, and areas where it has not. Typically, this stage involved measuring the success of value drivers.

In cases where value has increased and can be traced to increases in customer value, or to increases in new business, then financial sellers and analysts responsible would receive compensation. Incentives are determined at a fixed percentage of income, but neither managers nor financial employees would disclose the figure. However it is clear that basic accounting measures are used to determine the levels of compensation required, and VCMA is crucial to tracking movements in underlying accounting categories.

Owing to the increased reliance upon the value report, as discussed in chapter 5, EquiGrow also communicate value creation to interested external parties; these often being existing (and potential) investors. Here, internal accounting information is gathered from the range of VCMA metrics implemented throughout the organisation and is then placed in the embedded statement. The premise of this, according to the senior accounts manager, is to "encourage fresh investment with [publication of] this statement" (SAM, Aug, 2009). Internal communication also takes place in the form of managerial and board level meetings, where new strategic objectives are discussed in line with progress made on what was affected in the previous period. The cycle was reviewed on a quarterly basis (SAM, Aug, 2009; FM, Aug, 2009).

From the model, it is clear that the emphasis is upon a definition of value creation *for* shareholders, in that organisational returns are planned by management to exceed specific internal benchmarks in order to maximise the gains on any projected or planned business activity and also to maximise potential returns to shareholders.

This is based on resource based views and theories of the organisation, where attributes of a range of internal resources can be used to gain a competitive advantage (Barney *et al.*, 2001). There are also elements of the value chain and Porter's writings on strategy which underpins this practical conception of VCMA; EquiGrow, for instance, have identified value drivers and have then attempted to use them throughout the value creation process by adding more resources to exploit their strategic capabilities in their capacity to generate higher value, for instance, allocating more resources to marketing teams in order to attract new business and clients (MM, Sep 2009). Returning to an earlier point, the senior accountant felt that value creation for both customers and shareholders was possible and that "by keeping customers happy, we keep shareholders and investors happy" (SAM, Aug 2009). By identifying customer satisfaction as a value driver, the company then aims to maximise satisfaction through 'better' customer management practices which is fostered through cooperation between the accounting and marketing departments.

Similarly, the case is the same with regards to HR – employee productivity is identified as a value driver, so efforts are made to merge functionalities of both departments for a more effective review of target performance so as to enhance employee productivity, or in the least to increase efficiency as acknowledge by the HR manager at EquiGrow, who corroborated this by stating "there are certainly gains to be made… [could be through] using accounting information for review meetings" (HR Sep 2009).

Important to the success of this process of shareholder management is the view taken on resource allocation, which alongside internal versions of CRM practices, was implemented by EquiGrow in the form of customer portfolio management. Here, there are obvious parallels to neoclassical-inspired financial economics of the market, particularly through the scholarship of optimal investment selection. Redefined for value creation in the customer accounting practices of EquiGrow, a portfolio theory similar to financial portfolio theory as developed by Markowitz (1952), for instance, surfaced where the use of customer accounting metrics can select which customer groups are the most valuable to the organisation and then constructing a portfolio of customers, as a form of investment, which optimises value growth in the long-term by eliminating potentially costly customers, and in so doing can eliminate disloyalty across customer groups and decrease the element of risk involved in holding customer groups as a long term investment. Hence the investments and the related customer management practices within EquiGrow stem from the operation of a portfolio perspective, in that valued customers are part of their wider CRM scheme.

Thus, whilst management accounting techniques are used in different ways, the management accounting information is utilised in a similar manner in both companies, specifically, that accounting information is inexorably linked to strategic concerns of the organisation and explicitly in both measuring and monitoring the strategy of value creation. For EquiGrow this entailed monitoring of specific value drivers.

Under SSI, the strategy of value creation was pursued initially through the increased customised solutions proffered to customers, inherently linking customer satisfaction to increases in customer value, which contribute overall to firm value. Through this perspective, customers are recognised as the key driver in value creation, as the senior accountant noted, “by keeping customers happy, we keep [our] shareholders happy” (SM, Apr 2010). However, analysis for SSI revealed a strategic view of halting their decline in value destruction, which manifested in various accounting technologies permeated through the organisation in the guise of VCMA. During the first round of interviews, this related to exploiting the company and industry value chains so that areas of advantage could be found and utilised to extrapolate gains in efficiency; the most dominant example in SSI related to supplier scorecards and the search for cheaper suppliers through accounting measures (as discussed in section 6.2.2). Process efficiency was encouraged through performance maps and PDPs and VCMA was inherent in a mixture of softer and harder accounting information, as a visualisation of key patterns of value was enabled (in performance maps) so that accountants were able to gain an understanding of how value creation was linked to their performance as individuals, and value was also explicitly linked to developments in employee knowledge (in PDPs) where more tacit and learned knowledge concerning processes and tasks enabled value to be created through greater efficiency through increased productivity as well as through the development of intellectual resources.

Elements of financial crises also impacted upon both case companies and also impacted upon the development of accounting at both organisations. As outlined in previous chapters, the process of second interviewing was conducted in the immediate aftermath of breaking news concerning a series of high profile cases of EquiGrow’s international competitors experiencing financial difficulties, whilst second interviewing at SSI was conducted a year after the purported effects of the crisis was evident across European economies in 2010. An interesting side effect of the crisis for both companies was revealed, as both shifted their focus on their own separate notions of value creation to a more explicit consideration of how internal resources could be squeezed in order to find both economies of scale and economies of scope whilst preserving the main accounting and strategic shift toward value creation.

For EquiGrow, this took the format of job-sharing and staff reductions, which meant increased burden placed on customer services employees. The perceived scope of the crisis at the time of interviews was unknown across all organisational participants, for instance customer services employees feared layoffs, but EquiGrow attempted to pursue strategies of value creation with the explicit goal of reducing inefficiency and the implied goal of cost reduction. This interweaving has (in)directly led to a more opaque strategy of streamlining as the senior accountant, stated wider aims to cut costs by around 10-15% annually, revealing that "as part of this process, [we], on a global basis, are aiming to reduce costs by 20%..." (SAM, Aug 2009). From an accounting perspective, some of these changes have been implemented through job sharing and accounting is implicated in this process of identifying cost savings - accounting measures allowed change to be facilitated through the identification of inefficiency. Further to cost reduction measures, the company have also discussed the possibility of selling the asset management arm of their business in order to concentrate fully upon the more lucrative pension and life insurance branch.

Also, because of the crisis, EquiGrow's focus upon innovation decreased and, instead, more is expected from employees in target measures, in order that they recognise problems in their job processes and eliminate them. In this manner, employees operate in order to further identify and eradicate inefficiencies, as documented through daily review meetings and HRA measures of productivity (in section 5.2.2).

For SSI, the most apparent effect of the crisis upon business operations is the increasing trend to use open source software in the development of their customised software and hardware products. The espoused benefits of using open source are identified by an accountant as "maintaining some degree of control over our daily running and maintenance costs… open source [usage] avoids rigorous testing of any software we develop onsite… [the testing process] can be very costly, not to mention hiring costs in employing dedicated testers and developers, allocating space for them, subsidised canteen costs, securitised building measures and related IT costs that would all contribute to smaller margins" (SAM, Apr 2010). The links between cost reduction measures as a way of increasing shareholder value at SSI are noted throughout chapter 6.

When viewed together, there is a sense that both organisations have utilised VCMA, under the inertia of the external financial crises, to deepen their search for efficiency, which is portrayed as an underlying characteristic of TMA. Whilst novelty was used, it was deployed in a more traditional concern. This questions much of the logic over the ostensible purpose of accounting in times of a new economy, and is perhaps representative of reliance upon traditional ideas and practices in times of greater environmental uncertainty. VCMA could be the deployment not of new technologies, but of a different type of lens, the rationale for which still stems from a traditional logic. To explain further, it would seem that customer accounting at EquiGrow, for instance, was used to identify sources of profit (as traditional techniques would stress) but that the search for sources of profit has been extended to be more inclusive of external information (a new way of seeing). Tortured metaphors aside, there is compelling evidence across both cases to suggest that VCMA can co-exist alongside TMA, and that both can be deployed under traditional business logics and for more strategic roles. Again, this would contradict the literature which notes that the old has no contemporary relevance, and it would seem to support the concerns of a range of commentators who point to the wider existence of a divergence between theory and practice, not least in organisational contexts where, for instance, specific aspects of practical techniques are adopted and implemented on the basis of which attributes provide a fit with either overall strategic orientation or overall organisational criteria.

Consequently, accounting is implicated in setting the strategy of both case companies, leading to a divergence from the perceived traditional role of management accounting as a costing system. But whilst in practice this difference is documented, theoretical characteristics of VCMA are still largely representative of underlying assumptions of NCE, which may carry implications for the development of future management accounting practices and theories. However, this might be another issue for another time. In terms of divergences from, perhaps, the received wisdom concerning the roles of TMA, VCMA did exhibit numerous characteristics that could be seen to be different from the old and perhaps more closely linked to concerns that congeal around the new. In addition, several organisational changes were noted through the implementation of VCMA. These are explored in turn below.

7.2: Inter-departmental cooperation

"It's not just about efficiency in operations and positive profit impacts; we want to become value efficient" (SM, EquiGrow, Aug 2009).

The concept of interfunctional cooperation has been advanced within the case study to uncover novel and innovative uses of a management accounting perspective to the valuation of customers, and a management reporting perspective to usage of HRA. This approach by EquiGrow incorporated a number of accounting metrics to promote the creation of value for shareholders, but most notably the accounting was done outside of the accounting department. Previous research on interfunctional cooperation (Roslender and Hart, 2002; 2003; 2006) suggests that cooperation between different business departments was integral to the achievement of organisational strategic goals. To elaborate; accounting measures enabled the organisation under study to uncover and thus utilise intra-organisational resources in the pursuit of competitive advantage. In a later theoretical discussion (Roslender and Hart, 2006), interfunctional cooperation was also suggested as a platform through which innovative accounting metrics to account for brand value might be deployed, as the creation and management of such metrics would be a responsibility of both accounting and marketing functions: a point of interaction between marketing and accounting which has been stressed elsewhere as being indicative of a source of advantage to organisations (Roslender and Wilson, 2008; Weir, 2008).

Within EquiGrow, notions of cooperation were performed with an instrumental purpose of performance measurement and to enable "better" management of resources, such that HR and accounting functions were complicit in providing and delineating performance measures and targets for employees, whilst unrealised value sources of customers was made possible through the interaction of finance, accounting and marketing functions. Cooperation was also sought through job merging by creating a space for customer service employees to serve within sales teams.

Thus in response to the financial crisis the strategy of EquiGrow remained the pursuit of shareholder value which has meant a specific application of accounting logic to other areas to render visible sources of value and then extract them for purposes of growth. In other words cooperation was encouraged to support a strategic response to crisis, and accounting becomes the vehicle of organisational activity in aligning processes and procedures to strategy of value creation: value is then achieved through merging of ideas between departments.

Roslender and Hart's (2003) examination of SMA revealed that in their case organisations interfunctional cooperation between accounting and marketing departments was enabled through the strategic pursuit of brand management, and contributions from marketing, finance and accounting led to the development of a subset of brand valuation metrics in order to achieve the strategy. For EquiGrow, cooperation was enabled through the pursuit of shareholder value, and similarly a contribution from marketing, finance and accounting departments created novel forms of accounting metrics and performance measures. Specifically, accounting, finance and marketing functions shared interests in the level of revenue attributable to customers; consequently valuation models were developed and updated leading to significant efficiency gains from sharing the same information, in addition to enhancing these department's strategic focus by encouraging congruence towards pursuit of increasing shareholder value through better levels of customers management as well as widespread departmental usage of customer valuation metrics.

In addition, the joining of departmental functions, in both cases, and use of accounting concerns as a common logic or link between departments also promoted inter-departmental functioning; specifically that no one department was isolated from another, and each department would gain a greater sense or understanding of the business. Since the links between departments were advanced along efficiency and value terms, this mutual or shared understanding can be interpreted as being related to business performance, such that departments were encouraged to communicate and interact on issues pertaining to efficiency, which would enable economic recovery for both EquiGrow and SSI respectively.

Tied to increased intra-firm cooperation are notions of changes to both the role and remit of the management accountant in practice, particularly as interfunctional cooperation requires an understanding of how different areas are and can be affected by accounting decisions. This primarily extends to professionals being cognisant of other disciplines and learning new skills. Bromwich and Bhimani (1994) urged that management accountants should ameliorate an understanding of common marketing problems and processes, and further stressed that the role of management accounting professionals have in relation to the strategic activities of the organisation should be more integral, a view that is commonly shared by Roslender and Hart (2003) who urged that a cross fertilisation of ideas between the marketing and accounting functions in an organisation can cultivate a sustained competitive advantage.

From both cases, it seems that the role of the management accounting professional is indeed shifting in this fashion, as cooperation between accountants and other departments in SSI led to the production of managerial reports, and at senior level across both cases, managers of departments were seen to collaborate on the development of a range of measures, entailing some cross-departmental knowledge.

There have been some concerns echoed in both the academic and professional literatures, that the traditional role of costing and cost stewardship is changing to encompass a variety of roles and descriptions, including conceptualising the management accountant as internal business consultants moving towards a hybridised professional accountant (Burns and Baldvinsdottir, 2005; Burns and Vaivio, 2001).

This coupled with a greater prominence of management accounting including wider roles than traditional remits dictate, for example, there is an increased expectation of management accounting systems to provide information relevant to strategic decision-making and points to a changing nature of both the professional and profession. It might also point to a facet of professional life and organisational functioning that contradicts academic conceptions of the organisation with clearly defined (departmental) boundaries and composed of rigid functional structures (for instance, see Llewellyn, 1994), but this is a larger concern for another time.

Synthesising this research, the professional management accountant has been theorised as changing to a more consultant-type professional, which shares elements of change as experienced by participants in both case studies.

7.3: The creation of (calculable) space(s)

Notions of space and the organisation of work practices has been documented within management accounting as featured prominently in Miller and O'Leary's Caterpillar case studies[10] (1994). The reception to early work by Miller and O'Leary has been

[10] In addition the notion of space has been receiving renewed attention within organisational studies literature. Whilst this development is, perhaps, too extensive to review here, an excellent discussion and analysis can be found in Felstead, Jewson and Walters (2005) *Changing Places of Work*

discussed in polarised terms, with subscriptions to their views of spatial re-ordering informing empirical case study work (Vaivio, 2006), whilst being viewed controversially by some, with commentators claiming that the piece is deeply entrenched in idealism (Armstrong, 2004), and that the reported experiences of the workforce within the case studies could not be reconciled with the findings (Arnold, 1998). With this in mind, I have tried to present the insights gained from the case studies herein to address some of these criticisms.

Miller and O'Leary (1994) discuss work processes of Caterpillar and focus explicitly on the re-organisation procedures as part of the 'Plant with a Future' initiative. At the time of fieldwork, the researchers noted that the opening of the new plant had completely inverted organisational production processes to such an extent that the plant floor was redesigned to facilitate multi-task assembly in four key areas, and the accounting (and accountability) systems were similarly redesigned. The resulting change of accounting led to the establishment of a number of small business units within the plant floor, and groups of workers would act as proprietors for each small unit. The essence of this shift stemmed from embracing notions relating to a customer focus and the use of competitor cost analysis. Accounting, for Miller and O'Leary had a literal effect on the manufacturing process and had thus prompted a shift in the spatial-temporal context of the organisation.

In addition Carmona et al (2002) analysed manufacturing operations at the Royal Tobacco Factory in Spain, noting that accounting practices were designed with monitoring of production of various tobacco products, and costing techniques, such as direct labour expenses, were used as the basis for setting and implementing production targets. Cost records were thus available for individual line operators in the factory and the costing techniques quantified each individual's output and rendered them to financialised subjectivity, and factory floor space was conceived through calculations in monetary terms, so the study highlights the rendering of physical space as amenable to calculation. Another insight reveals the intertwining of space and accounting carried power implications, which were seen as creating a nexus of accounting practices designed to intensify disciplinary power. Quattrone and Hopper (2005) contributed to spatial ordering in management accounting research through their recognition that technology can also drive spatial relations through the creation of distance; for them IT embedded in MCS produced a new form of space in the organisation in which visibility of practices was easily rendered. This particular concern will be addressed in section 7.4.

Crucially, these studies reveal that the design of organisational work spaces and spatial practices are, to some extent, guided by accounting calculations, pointing to concerns over how organisational participants are exposed to monitoring and discipline through accounting measures.

Spatial concerns within both cases reveal a simple accounting story: costs can be reduced through the identification of waste and inefficiencies, and savings can be made through the efficient usage of space. This narrative was invoked by senior-level participants during the interviews; on discussing the rationale behind job-sharing initiatives at EquiGrow, the HR manager linked economic rationalism to reshaping:

"[…] by moving some of the sales work here [to this floor], we are able to cut the costs [*gestures*] upstairs" (HR, Sep 2009)

However, in light of the above contributions to understanding how space is rendered by accounting, an alternative accounting story across both case studies emerges, and an alternative representation of case discussions can be offered: amenability of individuals to spatial re-ordering and discipline through accounting measures. To be sure, the EquiGrow case revealed a heavy pre-occupation with employee consultation and involvement in the decisions on departmental work processes; that claims processors were invited to discuss this within their assigned work groups promoted EquiGrow's traditional value of working together, but also entrenched a group logic of identifying waste together: a mutual interaction and understanding of job processes based around concerns of accounting and non-financial efficiency. Essentially these workers were asked in their daily meetings to identify ways in which job processes could be made more efficient, and several participants noted that this included discussions over work and social spaces. An intersubjective rendering of social space amenable to accounting practice was promoted, as participants from one group identified that the time taken to buy coffee from the cafeteria located on another floor was potentially wasteful, and so a coffee vending machine was moved from elsewhere in the building to the processing department. In another scenario, these meetings discussed work breaks and cafeteria trips. This can be linked with isolating the groups in a calculable space (*cf.* Miller and

O'Leary, 1994), as meetings were seen by participants as coercive to producing efficiency. The following vignette captures this idea:

"[w]e felt forced to say something. Yeah, you know, by the end of the month the meetings were a joke, but right at the start we were all shit scared and we all just, you know, said stuff… it didn't matter… I sorta thought that saying something was better than no saying anything at all. I [didn't] want to sit there staring at the floor [because] I might lose my job or be told that we had an extra load of cases to shift. I felt pressure to say something, and I think the whole team felt the same.

Interviewer: can you say a bit more about why the group might feel the same?

Respondent: We were scared, you know… it's hard to… if we met daily and not said anything, we thought [the group leader] would see us not taking [the meetings] seriously, or trying to protect ourselves as being lazy or something, and we were, well I was confused, you know, we just said general stuff like coffee and fag breaks" (CS2, Sep 2009)

Within SSI, the gradual organisational streamlining of processes and increase in outsourcing rendered organisational space as subject to accounting logic. In one sense, as the on-site manufacturing practice was scaled down, SSI was able to reduce costs through a closure of perceived "empty space" (SAM, Aug 2009); here the immediate interpretation is one of economic rationality. Costs were avoided by not housing operations in buildings, and in addition outsourcing of several manufacturing jobs also allowed SSI to close parts of their on-site manufacturing buildings, again connecting with notions around space and cost saving.

Thus, the use of VCMA emerges as central to the reordering of space within both cases. There are clear links to case studies on the treatment of TMA and space (Miller and O'Leary, 1994; Quattrone and Hooper, 2005 and Carmona *et al.*, 2002), particularly as previous case studies have revealed that traditional practices also rendered organisational space as amenable to calculation, as well as delineating areas in which organisational participants are subjected to calculative practices. On this concern, VCMA can be seen to operate in a similar manner to TMA: VCMA in EquiGrow enabled social space to be (re)organised through group logic of efficiency which was central to HR-initiated VCMA; these same techniques were also able to isolate groups and expose them in a calculable space. VCMA also mirrored previous case studies on value-related practices, as exposing customer groups to various practices enabled a (re)identification of customers (*cf.* Vaivio, 1999). This idea of the exposing groups in a calculative space is explored further in relation to customers in the next chapter.

Related to spatial concerns is the notion of visibility, which was also present across both cases and central to the use of VCMA.

7.4: Visibility

Accounting imbues an object with properties, which creates visibility (Burchell *et al.*, 1980; Miller and O'Leary, 1987; Miller and Napier, 1993), and hence accountability (Miller and O'Leary, 1987; Quattrone and Hopper, 2005; Catasús, 2008). A number of accounting studies have engaged with issues of panopticism and addressed the linkages between visibility and control and accountability, however these are too voluminous to analyse in this space. What, perhaps, should be stressed is that these studies place visibility of practices as a central concern of accounting, specifically that accounting enables continuous monitoring and surveillance, which constructs an accountable or governable person as activities become observed and hence measured.

Customer Equity models provide visibility and accountability just as standard costing provided such a platform in managerial accounting theory (Miller and O'Leary, 1987). Thus the financial calculus of CLV appraisals and Customer Equity models readily embraces the reliable type of information furthered by TMA techniques, and in the context of the recent financial crisis, provided a ready medium through which the senior managers could instil platforms of accountability for marketing employees and managers. Through an enhanced analysis of marketing scenarios, decision makers within EquiGrow could be held to account on why organisational expectations and targets were not met. Across the organisation, accountability was entangled in accounting measures and increasingly derived as a measure or deviation from recovery targets, such that managers of departments were seen to affect more stringent levels of accounting control over employees in order to meet recovery targets fully.

An incident of exposure to accounting measures was evident in the claims department where team managers were given a freer role in determining the devolution of roles and tasks to members of teams, as the task load would be set weekly to all claim groups as an agreed level of cases, but the division of labour would be the responsibility of each team leader, and accountability would be rendered if the group were unable to process the agreed level cases within the weekly limit.

Perhaps on a more problematic front, notions of visibility are also imbued with considerations of power relations, particularly as VCMA in operation contained elements of employee performance measurement which has been identified in the literature as being linked to practices of control and domination, however this issue will be returned to in the next chapter, as the focus here is on elaborating the system(s) of measurement and links to visibility.

Customer valuation systems enabled departments in both organisations to place a financial valuation on groups of customers. In both cases, similar emphasis was present in systems of employee performance evaluation. SSI and EquiGrow both introduced detailed performance measurement and monitoring schema. At the level of claims processors in EquiGrow this entailed a series of non-financial measures and metrics that were to be deployed in monitoring customer call effectiveness and efficiency with pre-determined expectations for each employee to adhere to.

Accounting is central to this shift as the non-financial measures (NFM) used brought visibility, thus measurement, to previously unrecorded aspects of the daily processes. Furthermore, these processes were discussed in chapter 5 as driving value for the organisation. To recount this logic, the HR Director noted that explicitly recognising an improvement in overall job efficiencies could be a contributory factor in increasing case turnaround times and other value drivers. In collaboration with accounting staff, a series of performance measures were constructed and implemented. Subsequent updates to performance metrics and KPIs were conducted and deployed branch-wide in 2009. Alongside this, a series of policies were also enacted, including a reduction in internet usage time for each employee. Key to this was the inverse of the above assumption: that if a person could destroy value; equally there is the capacity to create value. Here accounting is once again central as accounting visibility is brought to a deeper level of job processes and it identifies potential areas of value creation, as well as value realisation, where, in the words of an accountant at EquiGrow:

“[accounting] can translate time savings into monetary gains. I can’t stress enough how important that is!” (A2, Aug, 2009)

7.5: Non-financial measures

Related to visibility is also a renewed focus and vigour upon non-financial information (NFI) and NFM. In a sense for both organisations, non-financial aspects of daily work were a largely unrealised source of potential value to the organisation. Owing to time constraints and a lack of meticulous focus in interviews, I am unable here to provide a detailed overview of non-financial measures and their relation to value creation in longevity; however, what emerged from the case studies was that both organisations were constantly engaging in updates to their accounting and information systems, and that NFI has been a large consideration for both companies both during and prior to interviews.

Similar instances have been well noted in the public sector accounting literature, where accounting change has been coupled with attempts to provide measures of efficiency; for instance, key performance indicators in the UK now function as a major facet of accounting practice (Lapsley and Wright, 2004) and includes some usage of accounting to capture non-financial measures of performance (Jackson and Lapsley, 2004). Viewed alongside developments in private sector case studies, as outlined above, the emergence of a sustained focus upon non-financial performance becomes clear; so too does the necessity of developing or utilising non-financial measures. Both cases presented in this thesis further support the findings elsewhere that non-financial measures are increasingly important in searching for, and exploiting, resources for competitive advantage (see Kaplan and Norton, 1996) and for value creation.

In both cases, non-financial measures were used to promote notions of process-based efficiency. For EquiGrow this involved productivity in processes, and for SSI this entailed monitoring gains from their industry value chain and their supply chain.

NFI enabled a more comprehensive view of SSI's value chain to be developed, as under rigid financial measures of efficiency and value were equated with measures of cost. But a shift towards supply lead times and delivery enabled overall performance trends to be identified and allowed SSI to augment areas of their scorecard system and capture supplier performance in the areas of quality and responsiveness. Value creation, hence, was related to an improvement in both financial and non-financial performance of suppliers.

A focus upon NFM and usage of metrics to capture NFI enabled EquiGrow to monitor productivity and quality in their customer services and claims processing services, whilst for SSI it enabled more effective management of their suppliers through a more detailed series of metrics in their supplier scorecard systems. NFI supports both value creation, and efficiency as an immediate response to the demands of the crisis

7.6: Extension of traditional apparatus

Bromwich and Bhimani (1989) and a number of then-contemporary commentators (Spicer, 1990) make claims that the role of management accounting be broadened to include a clear focus on strategic issues. Under the banner of SMA, Bromwich and Bhimani (1989) and Shank and Govindarajan (1989) attempted to provide insights upon which frameworks might be built to provide cost information and accounting with an explicit focus on strategy. On a related issue of practice and professionalization, Otley (2001) discusses in depth some aspects of a changing profession and what that implies for the role of management accounting within organisations. In these instances, scholars routinely called for an extension of practical apparatus and a broadened role of/for management accountants. Recently, Johansson and Siverbo (2009) also argued for the adoption of an explicit view of organisational accounting change as being evolutionary; that is, change in organisations is driven by internally defined criteria where practices are selected or refined based on the over-arching needs of the organisation, whilst accounting undergoes several shifts in response to these organisational needs whereby the processual outcome of change is a form of accounting which has been selected by organisational participants as being varied in nature and meshed to the tailored requirements of the organisation's accounting and informational systems: evolutionary change occurs across a range of behaviours, rules and processes as a result of variation and selection in practices.

Theoretical advances and empirical cases since the late 1980s and early 1990s have yielded differing levels of support for these claims, and have been discussed elsewhere in this thesis. But what is noteworthy from both cases is support that traditional roles of performance measurement have been extended to notions of performance management. For SSI, performance maps were used to align the tasks and performances of employees to the overall strategy of the company, which inherently brings a strategic element to their practical deployment that enables accountants' tasks to be monitored, and hence managed if targets are not being met. This was facilitated by an increased understanding of business operations which was partially achieved by incorporating external information relating to the business environment into the analysis. A similar logic was applied to the implementation of vendor health checks as part of the company's ongoing evaluation of suppliers through the use of supplier scorecards. Thus, by increasing the links between internal control systems and strategy, the company was in a position to manage performance of employees and suppliers. Reminiscent of earlier writings on SMA noted in chapter 2, the usage of MA measures in SSI were representative of attempts to extend the boundaries and scope of accounting to include externally-oriented information.

Perhaps central to the extensions and alterations to their roles in organisations, management accountants now have a greater focus on 'soft' information, numbers and measures; for instance the use of environmental performance measures in supplier scorecards (section 6.2.2). The implication is now that management accounting systems are developed to deal with this facility of MA.

The increased use of soft information can also imply a greater prospect for narrative information within accounting systems and businesses generally, which has been discussed in relation to the use of intellectual capital (see, Roslender and Fincham, 2004). Indeed, in both organisations studied softer information was used to monitor and measures facets of performance across a range of departmental and processual functions, most notably with respect to customer service employees in EquiGrow and for accountants in SSI.

Contentiously, then, what emerges in this section and from both case studies is not so much that VCMA is representative of "new" forms of accounting, but rather constitutive of an advancement of traditional logic and practice.

7.7: Fluidity of practice

Across both cases background events, such as shifts in external business environment such as recent financial crises, stimulated changes in the daily work routines of organisational participants. Under a critical realist framework, a change in the working environment was presented in the cases as representative of shifts in the Domain of Empirical, and are theorised as functions of agency and structures which can influence organisational functioning. Reviewing both case studies along this framework, it is evident that pursuing a strategy of value creation through the use of accounting information (or to be more explicit the use of management accounting techniques that seeks to maximise value) led to a reterritorialisation of accounting information that replaced departmental functions elsewhere in the organisation. For instance, SSI pursued value creation as a response to the dotcom crisis, which formed into the strategy of value marketing, which married the accounting emphasis on efficiency with the organisational programme of marketing. HRA was also invigorated with accounting measures of productivity, which was discussed across both case studies.

In each of these cases, the result of this disentangled use of accounting information weakened ties between organisational function and organisational space. This also resulted in a removal of some accounting responsibilities from the accounting department to such an extent that some measures of VCMA were not the sole preserve of management accountants in both EquiGrow and SSI: Value marketing, under SSI, saw departmental boundaries deconstructed and replaced with an amorphous form of accounting that encouraged inter-departmental co-ordination towards the unified goal of value creation; for EquiGrow the same transcendence of departmental boundaries was noted, specifically with regards to the widespread usage of non-financial accounting measures in the HR function (engendered throughout the organisation as a joint project between HR and accounting departments) and within marketing (through the continued development of customer metrics). Whilst these instances go some way to supporting previous findings of inter-functional cooperation (*cf.* Roslender and Hart, 2003) as noted above, I would also like to connect these particular findings to another set of readings within the management accounting literature, specifically to contribute to a debate regarding the reconceptualisation of management accounting.

To be sure, similar findings have been proffered elsewhere, specifically within the Cyclemakers case (Lord, 1996) where accounting concepts were developed not only by accountants but by others in the organisation. In both cases VCMA metrics are not solely developed by accountants, leading to an organisational fluidity of accounting. Secondly, these new developments sit alongside older and more traditional techniques, and this has the ability to contradict theoretical logics of a lack of confluence between old and new. As noted above the apparent newness being observed in these cases is not at the technical level of measurement, but at the practical level of organisational functioning. EquiGrow initiated a “new” metric of customer valuation and this led to a development of IT systems and shifts in work routines. SSI implemented a “new” metric of productivity alongside older control systems. It might even be the case that what I have observed in both chapters 5 and 6 is the use of the new to assert the old, that both co-exist in a problematic hegemony; a point discussed in the next chapter.

7.9: Summary and Conclusion

It is perhaps an unfortunate condition of language and binary thinking that, in management accounting research, concepts representative of the “new” are presented in such a fashion as to be displaced from those of the “old”; dichotomous analogies (re)conceptualise practical innovations as polarised from traditional measures and this polarisation can be found, implicitly at least, in case study and empirical research on accounting change, and in instances where there are no observations of the “new”, scholars question that it even exists at all (see the conclusion of Lord, 1996). Perhaps, here, it is testament to the fluidity of practice, that there are little or no boundaries between what constitutes old and new, traditional and innovative, in a practical context. What we imagine as clearly defined and rigid in theory is not so in practice, and what emerges is a sense of different uses in different contexts, where “different” might include some merging of technologies, such that traditional or established practices might be augmented to include a wider focus necessary to support strategic and value-based decisions within an organisation. Equally, considering that the data gathered in the case study process was done at a time of extreme external circumstances, the findings might point towards an idea that in the most negative operational conditions, there is an increased reliance upon tradition.

Consequently, I argue, that both cases do not fully support theoretical claims that traditional and contemporary practices are distinct. Instead I argue that in practice there is very little, or no, difference between traditional and novel techniques; that what is perceived to be “new” management accounting, is rather an extension of traditional ideas that are applied in a different fashion, and furthermore, fundamentally extends the operation of accounting within organisations.

As a final point, the implementation of VCMA in both instances has engendered changes in the social and political aspects of the organisation, and evidence includes, amongst other things, an aggravation of labour-capital tensions. The issues revealed in these areas were far more than anticipated, accordingly the next chapter will be devoted to discussing these at length and owing to the emancipatory intent of a critical realist framework (Bhaskar, 2009), and insights for resisting these issues are also promoted. However, what is important to note here is that VCMA operates in practice, with regard to social and political concerns, in a similar manner to traditional techniques, in that, VCMA ensures the prevalence of the status quo and does not challenge existing organisational relations, and in the case of customer management, in fact, enhances existing conflict. This is now elaborated and analysed in the next chapter.

Chapter 8: Reflections and Further Analysis

8.1: Introduction

Whilst the previous three chapters have considered practical contexts of VCMA, the purpose of this chapter is to highlight changes in the socio-political contexts of the organisations which stem from implementation of VCMA, which is consistent with the main research aim of this thesis: to study accounting change; and further consistent with the fourth sub-question of the thesis, which is to determine any socio-political changes resultant from VCMA adoption. Within the cases presented, VCMA adoption can be seen to exacerbate fundamental antagonisms between labour and capital, suggesting that VCMA can be used to organise and control contemporary versions of capitalism; such that the role of management accounting within the organisation is unchanged from TMA; that amendments to the organisation brought on through the adoption of new accounting technologies purport to reassert this privileging of capital over labour.

Observations in both case companies are broadly consistent with the conclusions drawn by Cooper and Hopper (2007) in that new or contemporary techniques have not moved away from elementary labour conflicts. The critical realist framework employed in this thesis advocates a focus, or at least a consideration, upon human emancipatory interests, and hence engagement with the critical realist emphasis upon emancipation corresponds to the fifth sub-question of this thesis, which is to evaluate the prospect of an emancipatory intervention. The chapter proceeds thusly: in the following section, a discussion and analysis of the socio-political relations in both cases is presented, and highlights changes stimulated by VCMA upon the perception and marginalisation of both customers and employees. An overview of emancipation in a CR framework is then presented and links to related developments in the field of critical accounting, which is utilised as a base for yielding insight into the negative consequences of accounting change upon both customers and employees, as well as attempting to further dialogue on the prospect of an emancipatory accounting project by seeking potential accounting solutions to the negative consequences identified throughout.

8.1.1: Critical Realism and the structure-agency dualism

Before substantive attention is given to a detailed discussion of the socio-political aspects of VCMA, it would first be prudent to highlight how accounting change in both EquiGrow and SSI can be understood from a critical realist framework.

Both cases pointed towards a recognised fluidity of practice that ostensibly extends the focus of existing management accounting systems in both organisations: the adoption of VMCA techniques brought increased visibility of practices (as well as employees and customers) and the deeper use of non-financial information. In these instances, VCMA elaborated the focus and scope of TMA to explicitly include consideration of value creation.

Under critical realism, change is theorised as being the product of both agential interactions and structural influences. As discussed in chapter 4, this is a position distinct from other theoretical frameworks of social interaction, such as Giddens' (1984) structuration approach, which posits that change is mostly structural as agents reflect on structure and act in such a way as to reproduce structural influences (Archer, 2009).

Under Archer's (1995) mobilisation of critical realism, people have emergent properties, which result from their embodied nature, as part of a social reality, but these emergent properties do not rigidly define their behaviour. Instead, people may be partly conditioned by their properties, but they behave in different ways and their behaviour takes place as interplay between individual knowledge, characteristics and the properties of the system in which they act. Consequently, structures do not completely determine and explain agential actions, and Archer maintains that structure and agency be viewed as separate categories of analysis.

Hence, a key component of critical realist research is the advancement of an analytical dualism (Le Boutillier, 2001), which seeks to maintain both structure and agency as separate, yet related, categories of analysis. In so doing, structural concerns may impose limits or constraints upon agency. In Archer's (1995) analysis of the structure-agency divide, she theorises that individuals have the ability to resist or repel the conditioning aspects of structures, such that their behaviour and actions are not fully shaped by structures. Resistance, especially on an individual level, emerges as a potent explanatory variable within critical realist analysis. Similarly Fleetwood (2005) outlines the potential for critical realism in organisation studies and maintains that the separation of structure-agency allows the research to probe issues of control and resistance, and can also allow for detailed exploration of the contexts and processes in which power, and hence resistance, may be embedded.

Such concerns have been mobilised within the management accounting literature by Stergiou *et al.* (2013) in a study that viewed accounting change in a Greek family-owned firm as the result of interplay between structural constraints, and different agents positioned within the firm. The difference between agents was explained as a result of power relations, in that some managers within their case firm held power and would align themselves with structural constraints that led to increases in their power, or act in accordance to maintain the status quo, whilst other agents experienced less influence, and power, over organisational affairs and enacted structural constraints as a means of gaining trust and privilege. However, other agents in the study did not behave in accordance with the structural constraints imposed on them, taking accounting techniques from, for example, new ideas rather than the structural constraints consisting of changing market and regulatory conditions. As such, Stergiou *et al.* (2013) claim that the interplay between agents and agents, as well as agents and structures, are nuanced and a critical realist framework is intended to reflect such concerns.

Thus, the interactions between agents and structures becomes important for critical realism, and agents, as theorised under Archer, can have explicit vested interests in the outcome of social processes and hence the potential changes being made. Broadly commensurate with the advancement of critical realism in the existing accounting and organisational literature, there is recognition that these agential interactions can have an effect on organisational power relations. The findings of both case studies are now analysed and interpreted through this analytical dualism.

8.1.2: Structure and Agency at EquiGrow

As noted above, structural constraints of change represent particular influences that can shape behaviour. Within EquiGrow, structural concerns of change explicitly addressed the financial crisis, as the stated strategic aim, pre-crisis, included the desire to increase both EquiGrow's customer base and market share. However, during the second interview phase, the strategic aim had shifted to financial recovery, in that managers were under increased trading and market pressures, and the changing competitive environment encouraged the development of several accounting techniques designed to alleviate these structural pressures, and hence to contribute towards the creation of value. Consequently, a number of techniques were implemented to attempt to reflect the changed market conditions, and also to meet with the overall strategy of creating value. Implementation of these techniques introduced several changes in EquiGrow, and a number of these concerns are discussed below.

Changes to customer valuation system

The customer valuation system had changed several times prior to the commencement of data collection in 2008, and the rationale for change, on each occasion, was linked by senior organisational participants to EquiGrow's strategic aims, suggesting that customer value (and hence the apparent need to refine measures of it) is key in pursuit of a value creation strategy – in this way, the shift towards valuation under VCMA was central to meeting EquiGrow's stated strategic aim of identifying new customers – and represented some degree of commensurability with identified external pressures, such as intensified competition, and hence structural constraints emerged as central in supporting the adoption of refined CLV measures.

Additionally, the IT system was modified to better fit the requirements of the CLV models in use at EquiGrow. This change was also conducted at the request of employees who had previously voiced concerns over the IT system, claiming also that it did not meet their data collection requirements. Financial analysts also adopted the new model, and through the links with incentivisation, used the model to try to identify valuable customers or customer groups, and going further the analysts and sellers also noted that they had intensified their workloads.

In this reading of change, it appears that agents have willingly enacted the structural constraints and hence adopted CLV measures with little reflexivity or autonomy, as analysts and sellers enacted these influences through considering the economic outcomes espoused through the linked incentives system. However, when managerial concerns are brought to the fore, an alternative explanation is possible.

The updated CLV metrics represented a set of newer techniques that enable a real-time judgement to be made on how value targets were being met. It is worth summarising that one of the senior accountants (SA2, Aug 2008) at EquiGrow also identified the potential to embed frameworks of accountability into the CLV models, claiming that the updated measures of customer value allow managers to identify which sales teams, or groups of sellers, are responsible for deviations from sales targets.

To be sure, there was some initial resistance to CLV measures highlighted in 2008 interviews, as sellers and analysts would engage in forms of unproductive behaviour during the average working day, as summarised in section 5.2.1, including taking lengthy and frequent cigarette breaks, arriving at work late, and avoiding meetings. However, incentivisation had done much to lower this resistance, with analysts and sellers now recognising the benefits of meeting targets, precisely that it was better for both managers and sellers, to increase new business clients (see section 5.2.1).

Changes to IC reporting metrics

In 2008, during the first interview period, IC reporting was used by EquiGrow, but individual knowledge components were identified and HRA measures subsumed some of the functionality and remit of IC metrics in 2009. To some extent, the IC reporting function had less importance during the second interview stage in 2009, as this importance shifted to the compartmentalised measures of employee performance contained within EquiGrow's HRA mechanisms. Importance also shifted to the Value Report (section 5.2.3), wherein senior employees recognised the potential for using the Value Report to relay important information about internal capabilities and performance to external user groups; this was mobilised under concerns of 'value realisation', as the crisis had brought a greater degree of price and valuation volatility, which also stimulated a loss of faith amongst financial staff at EquiGrow in market measures, such that senior managers within EquiGrow believed that the Value Report could address aspects of market and value volatility, by stressing internal measures of value.

In terms of the analytical dualism, the market, and wider trading conditions, again acts as an important mechanism in generating accounting change. However, the decision to split aspects of IC metrics into HR components, and hence transfer responsibility for measuring IC to the HR function, was a decision taken by senior managers at EquiGrow, and demonstrates agency in attempts to stress and overcome the possible unreliability of market measures; the senior managers (particularly SAM, Aug, 2009) claimed that the information in the Value Report could be used to assure current investors that pessimistic forecasts and valuation of EquiGrow were exaggerated, as the report contained important measures of, for example, growth and employee knowledge, that were not used in determining market prices. As such, the Value Report was used as a means to boost investor confidence, and senior organisational participants enacted this accounting change as a means to maintain current investment levels, and thus meeting value creation targets. That the interviewees also identified that the report could generate new investment also demonstrates the potential worth of the report in expanding this logic further and that the report might be useful in future periods as an accounting tool that could create longer or medium-term value through increased investment.

In this sense, agents recognised the changes in the trading environment as important structural conditions, and it is possible to interpret their subsequent actions as responding to these perceptions, such that the structural conditions pushed the senior organisational participants to change the management accounting practices in EquiGrow so as to ensure that value creating targets were met. This led to agents extending some aspects of the customer valuation system, so as to identify previously unrealised sources of value, and to embrace some new ideas, such as the greater efforts expensed in producing the Value Report. In addition to this, employees at other levels in EquiGrow were also pushed by the senior managers to accept the accounting changes, such that whilst customer valuation metrics may have had a negative impact upon the nature of work, and sellers and analysts offered some measures of resistance during the first interview stage, the incentivisation of meeting customer sales targets did much to quell this resistance, and, as above, the sellers and analysts aligned intent with senior participants.

However, there are other areas where resistance was more vocal, and a more critical interpretation of change can be located.

Changes to performance measurement

Through a critical realist framework, particularly analysing change by employing the structure-agency analytical dualism, it is possible to understand the internal emphasis upon recovery and the adoption of new performance measures, as a way of transferring the burden of recovery, and hence value creation, to lower level employees.

Within EquiGrow the strategic directive of recovery stemmed from senior managers and was introduced to claims processors and customer service employees via the HR department and team leaders, leading to the introduction of performance metrics and targets at the local level. Operational responsibility for meeting strategic targets of value creation was then taken away from managers, and then set for workers at an individual and team level. Key here is the inclusion of NFI as the base for several KPIs for claims processors such as turnaround time, call logging, which were crucial to this shift of responsibility. Team leaders, by instruction of HR, also initiated daily team meetings for customer service employees, wherein job processes and daily workloads and routines were discussed, with the structurally-supporting logic that individual employees could assist in driving recovery by finding and eradicating inefficiencies that they may uncover in their daily work routines.

However, there is also the idea here of inviting claims processors and customer service employees to become empowered and to take the initiative in developing job processes, rather than waiting for things to happen, and hence were designed to not only invite employees to move in the direction of the structural constraints, but to speed up this transition. To some extent, this was met with resistance, but the notions expressed by some interviewees, particularly the emotional aspects (that they are like a "pick me up") and motivational aspects of the meetings, implies that such resistance was no longer present in the second interview stage.

Performance measurement changes also affected the work of sellers though the setting of increased sales targets, and the integration of a deeper measure of CLV also brought an enhanced platform of accountability for sellers (although no interviewees divulged much about the consequences of not meeting sales targets). Alongside these changes to seller and analysts processes, attempts to codify the knowledge of customer service employees can be read as a means to develop new measures that can standardise, or normalise, processes and employee behaviour throughout EquiGrow.

In some way, this supports Cooper and Hopper's (2007) location of reinvigorated Taylorism within new performance measures specifically that recently developed performance measurements attempt to capture employee knowledge and capabilities in a measurable form which then becomes exclusively controlled by management and redeployed across the organisation according to managerial edict. It is also tempting here to read this aspect of change as a means of constructing forms of power/knowledge

- that (managerial) agency is linked to the creation of a new form of power/knowledge whereby managers gain more than control over employee knowledge (cf Ezzamel *et al*., 2004), but also control over customer service process and selling activities in a way designed to enact managerial discipline under the auspices of empowerment and incentivisation.

Empowerment entices through the increased, and seemingly, democratic participation of claim processors in organising and planning their daily activities and monitoring achievement through the identified efficiency gains - these efficiency gains would accrue and hence, on an aggregate level, lead to possible value gains for EquiGrow - but also here responsibility is key, as the visibility brought by the new measures constructs an expectation that each team, and indeed individual, is now responsible for meeting increased targets - hence employees are expected to show initiative and become pro-active in stream-lining operational processes. Managers do not need to become involved as the accounting measures, derived through performance measurement and monitoring, act as the motivating (and disciplining) force.

And incentives become involved in a similar manner for sellers and analysts by linking work with financialised targets that reflect strategic aims and objectives of increasing market share and maximising new business; in this fashion, sellers welcome and enact the strategic constraints, by reflecting on change primarily through an economic means or understanding. Managerial presence, again, is not required to motivate or discipline, as poor performance is equated with lower, or no, bonuses. As such, there appears to be great benefit, and indeed appeal, for managers is pushing adoption of performance measurement techniques of VCMA in EquiGrow.

Organisational roles and structure

In addition to some negative changes noted above, job-sharing initiatives were also developed in this way, as the specific features of data sharing across departments facilitated aspects of interfunctional cooperation (see section 7.2) whereby accounting techniques linked strategic vision across departments. This also engendered job-sharing as processors and customer service employees were given sales tasks including selling policies to new customers (section 5.3).

With the job-sharing, the processors' reactions were, obviously, negative, but I think they express some impotence and readily accept, perhaps after initial incredulity, the decision to do other tasks – pointing out redundancy fears if they do not comply, which teases out some concerns of collective agency, whereby any personal concerns of individual agents can be traded off against collective demands of the organisation. Here agency, despite resistance, is subservient to structural constraints as employees willingly enact the structural conditions by engaging in cross-department activities, but also predicating this on economic concerns, that the economic consequences of non-compliance outweigh the possible benefits gained from resistance.

However, the more interesting aspect of change concerns the push to adopt performance measurement techniques of VCMA. Interdepartmental cooperating in EquiGrow brought more involvement of other managers into decision-making processes, and greater use of accounting measures to (re)structure routines and altering organisational practices meant that aspects of the accounting function became embedded in other areas of EquiGrow. This wider involvement of other managers in decision-making may have eroded the apparent influence of senior accounting staff, however, by placing accounting measures in each department, there is a greater reliance on the accounting function, and alongside the continued abandonment of perceived ill-fitting techniques (section 5.3), there was actually more power given to the accounting staff, particularly at managerial level, in terms of deriving metrics that form the basis of target setting and performance measurement across departments. For that reason, agency appears as a deeper influence on stimulating accounting change as the push towards adoption comes, more explicitly, from the senior accounts manager, alongside claims that new measures are more suitable for responding to perceived structural demands. Hence, the senior accounts manager drives reliance upon VCMA in setting targets for recovery rather than structural constraints.

Another key feature of agency at EquiGrow concerns employee resistance, in terms of some processors resisting the meetings and measures of productivity highlighted above and in chapter 5; this brought about some response by managers, and is analysed in section 8.1.4 alongside similar features of agential resistance at SSI. Structural and agential concerns at SSI are presented in the next section.

8.1.3: Structure and Agency at SSI

Prior to the interview stage, SSI had undergone several changes allied to the shifts in their trading environment. As outlined in chapter 6, SSI's financial performance was negatively impacted upon by the dotcom crisis of the early 2000s, which in interviews with the senior accounting manager was seen as instrumental in shaping the strategic aims and focus of SSI. In addition, the measured decline in SSI's market share, alongside a loss of competitive position, was seen by SAM and ITM as important pre-cursors to widespread organisational change. In this case, these managers viewed subsequent change as an appropriate response to market contractions.

Such changes included increasing reliance upon outsourcing and embracing a cost reduction strategy, as well as an intensification of R&D activities and incorporation of IC reporting and accounting in the MAS. And, in the view of SAM, these important in gaining competitive advantage through increased customisation of IT products and services, but also in terms of adding value to existing commercial activities. To be sure, this logic for adopting VCMA was evidenced in interviews with several senior employees at SSI. Implementation of VCMA had a notable effect on several areas of SSI, and these are addressed in turn below.

Changes to cost system and cost control

During the first round of interviews, accounting staff, across all levels, recounted the parent's decision to implement forms of IC monitoring in response to perceived IC monitoring strategies in place at competitor organisations. Identified by the parent as an important facet of SSI's overall value growth strategy, metrics of IC performance were drawn from competitors and utilised in SSI with the expectation that implementing forms of IC monitoring would enable SSI to categorise employee knowledge and skills and develop these into areas where value may be created. Such strategic missives were delivered by the parent of SSI, and as such senior accountants and managers in SSI frequently claimed in interviews that they felt as though they had no choice in accepting the decision to implement IC monitoring given the emphasis from the parent board. Equally, dissatisfaction was voiced concerning the range of metrics, particularly as accountants and senior managers had identified potentially more useful metrics than those in use by competitor organisations.

However in 2010, the IC metrics and reporting mechanisms were largely abandoned as SSI as the parent de-emphasised their use as part of the overall response to the perceived demands of the crisis. During the second interview stage, accountants were at best ambivalent regarding the decision to stop active forms of IC monitoring, citing that other tasks and accounting measures had gained priority internally over IC monitoring throughout 2009, particularly initiatives relating to supplier management. At worst, accountants were glad it was shelved.

The decision to adopt was, for all accounting staff at SSI, rooted very much in external concerns and the final say was given by the parent. It is possible to interpret the lack of resistance in accepting the decision to implement IC monitoring as employees at SSI as being pushed towards adoption by the parent's strategic drive. In other words, it might signal the lack of total autonomy of agents at SSI, and reflection on structural influences was carried out in-line with structural constraints imposed by parent.

Furthermore, the decision to shelve IC monitoring, as an active SSI task and strategy, was made by the parent. However, here, agents were more active in their reflexivity, particularly as senior accountants and managers recognised the weakness of SSI's initial adoption of IC measurement. Adoption was driven mostly by structural pressures and through evaluating the strategies and metrics used by competitors, and attempting to replicate this internally, managers felt that this was simply a case of hoping that success will follow adoption. During the second round of interviews, the metrics were of lower importance, and accounting staff were keen to slate the metrics, claiming frequently that alternative, and indeed better, measures of IC could be produced and used (see section 6.2 and 6.3). Whilst the parent of SSI is seen as a driving force behind the abandonment of IC, the managers and accountants here reflected on the poorness of metrics used for IC reporting, and this also impacted upon the decision to abandon IC reporting measures.

So whilst structural concerns may be advanced as a primary driver of change in this case, as managers and accountants readily accepted structural constraints, with the notable exception of the PDP and performance maps used in the changed performance measurement system, agreeing with the oft-repeated rationale of recovery. Hence the actions of agents in 2010 at SSI demonstrate an incomplete agency, owing to the ready acceptance of 'recovery' and 'efficiency' as key motivators for adopting particular VCMA techniques, suggesting that agential reflexivity was pushed towards structural constraints more easily in terms of the adjusted cost system at SSI. For senior participants, this lack of independent agency stemmed from the decisions of the SSI's parent, and equally accounting staff were not fully able to exercise independence as actions were rigidly formed by structural influences as set out by both the parent and the internal position stressed by senior organisational participants.

In addition, the changes to cost control and management, SSI also brought in aspects of value chain accounting and supply chain management.

Introduction of supply chain management

Agents, reflecting on the wider structural influences, were also influenced by the new practices being developed and implemented by competitors. Managers, in particular, were keen to explore the possible advantages that might be gained by implementing forms of supplier management, however, during the first interviews felt that the previously used scorecard system was not generating the expected benefits, and thus abandoned the generic scorecard approach to supplier management, in favour of metrics developed internally.

On a general level, the supplier cost system shifted from a costing emphasis to a management one, as the metrics under VCMA allowed for a greater degree of control over SSI's supply chain, with stressed links to increased organisational efficiency. This was linked to recovery by senior organisational participants, and metrics were composed and deployed in order to identify which aspects of the supplier relationship yielded gains; no resistance was offered here from other employees as all willingly embraced and applied the new measures.

Structural concerns here were located within the external trading environment, mobilised by concerns over lost competitiveness and poor financial performance, and the response by SSI was to monitor the performance of suppliers and to find cost savings along the value chain, operationalised through supplier performance managements and through VHC. Such shifts to include VHC as part of the MAS brought change to the role of management accountants in SSI, as implementation meant that accountants had more daily work to do in personally collecting information for the composition of reports, such that there is less involvement in the decision-making process. This is also supported in the 2010 interviews as accountants stated that, typically, decisions are made on the basis of the financial performance of suppliers and that the varied metrics used were of little use to decision-makers.

However, no accountants voiced disagreement with the overall use of VHC; to be sure, accountants frequently repeated the structural concerns of market performance, claiming in their discussions that using NFI, such as CSR measures, are only useful if the customer can see the use. Similarly, accountants expressed some frustration over the measures used, but were not actively vocal in their critique of VHC being used on a daily basis.

This advocates the position of incomplete agency amongst accountants, as structural constraints were enacted despite feelings of inadequacy and impotence, suggesting that VHC may have been seen as a strategic priority. Even in citing better measures that could be utilised, little resistance was offered. It is in considering performance measurement of employees, however, where resistance materialises as a bigger concern.

Changes to employee performance measurement

The main changes in performance measurement at SSI concerned the PDP, which was seen by managers as assisting with recovery through setting targets and capturing employee achievements and capabilities. Specifically, the performance map and enhanced PDP were introduced against the backdrop of economic downturn, and was seen as an attempt to capture intangible value embedded in job processes and in employee knowledge - thus an attempt to stimulate value growth. This was claimed to be achievable through the identification of processual and task efficiencies. However, as within EquiGrow, senior organisational participants may gain indirectly from this, as the onus of value creation is placed on employees, as it is assumed that individuals will utilise their PDPs and performance maps to identify, and reduce, any inefficiencies in their daily routines. These individual gains, it is assumed, will be collectively accrued for SSI as a whole. Additionally, the HRA measures contain some degree of performance appraisal which the HR manager felt was crucial to motivate employees so that individually they would move towards the same strategic orientation of SSI, thus encouraging goal congruence and bring employees closer to the strategic emphasis of accounting change. In this sense, the accounting measures provide much of the impetus of coordinating employee behaviour, and managers are not required to directly intervene to push employees to accept the wider structural influences at play in SSI.

As with EquiGrow, employees, chiefly accountants, also demonstrated some measure of resistance against the newly implemented measures and metrics contained within the PDPs. Whilst the HR manager and senior accounts manager reasoned that the widespread adoption of PDPs could assist with the strategic intention to identify inefficiencies within job processes, several accountants attempted to invert the KPIs by, for example, inflating productivity, and in doing this reducing the efficacy of PDP measures. Employees hence utilised their agency to respond to the perceived demands of accounting change, locating possible areas of resistance, by disclosing false targets of reported performance. In this sense, accountants at SSI repelled suggested structural constraints and moved against the accounting change imposed. But this also leads to another interesting interaction, as managers raised suspicions that accountants were inflating their workloads and achievements, but in the interviews accountants were not yet aware of these suspicions, or in the least they did not disclose such awareness in interviews. There was the suggestion in interviews, particularly with the HR manager, that there may be attempts to increase some degree of slack in PDP targets, so as to coerce accountants to more readily comply with the changes made to the performance measurement system, particularly as the presence of flexibility might avoid setting increased targets in future periods.

Subsequently it may be argued that accounting change represents a benefit to managers as the expanded aspects of data collection, captured through the introduction of several non-financial KPIs that attempted to collect information relating to employee knowledge, as through the collection of this information leads to enhanced control of both employees and tasks, and within SSI, this also brought some shifts within the completion and arrangement of tasks.

Organisational Structure

As above with EquiGrow, there is a possible interpretation of managers, particularly within the HR function, utilising accounting measures to extract more control over employee's tacit knowledge, through codification into PDPs and performance maps, which enables managers to deploy employees as organisational resources so as to maximise possible efficiency. This was also supported by departmental coordination (section 7.2) in that value creation strategies instigated data sharing across departments, especially concerning intellectual and intangible resources.

Pursuing value creation strategies and the internal emphasis on PDPs and performance maps allows senior organisational participants to identify which employees may be in need of more management, and this led to frequent variation in daily operations, as accounting staff became rotated between tasks and projects. This rotation was conducted after analysis of PDP and performance information, as senior managers sought to include accountants in other areas and departmental meetings within SSI, with the hope that including accountants could lead to a wider range of ideas and initiatives being discussed (see section 6.2.3). In interviews, managers claimed that this exposure to other aspects of organisational functioning was done in an attempt to create smarter employees, such that the knowledge-emphasis of PDPs would not only enhance decision-making through additional information, but also the tacit knowledge of employees. In this sense, task rotation and data sharing represents attempts by managerial staff, particularly within the accounting department, to gain more control and power over organisational affairs, as the use and influence of accounting measures has seemingly spread, and been accepted, throughout SSI. Indeed, the greater instances of coordination imply that other senior organisational participants are willing to accept the organisational changes engendered by the accounting measures, and the ideas proffered by the senior accounting figures within SSI. This might suggest that in direct response to the changed market conditions, that the accounting department, or at least senior accounting staff, are instigating organisational change in accordance with the perceived demands of the structural pressures, and thus to gain more influence and power over the strategic decision making processes within SSI.

Additionally, these moves brought the managers of both departments closer to decisions and outcomes of the customer valuation metrics, and hence may be interpreted as a move to achieve control of the decision-making processes. Although data sharing was seen as beneficial for managers, the new flow of information made it easier for accountants and marketers to obtain relevant data for conducting customer analysis, but it also removed some accountants and marketers from decision-making, enabling a greater degree of senior or managerial control, as senior accountants and managers were now able to have some control over marketing affairs and activities, but marketers would not be afforded similar privilege in accounting concerns. As a result, this might be interpreted as managers protecting their interests through data sharing, but also gaining access and power throughout SSI, and the flattening of boundaries between marketing and accounting functions, supports this push by allowing access, and hence control of, shared data. Accountants and marketers were complicit in this process, as none voiced objections to the data-sharing initiatives in interviews.

This managerial push to enact structural constraints in SSI was also present in EquiGrow, especially with respect to the possibility of gaining more control over both employees and resources. This is one commonality between both cases, and is discussed in the next section.

8.1.4: Commonalities

Within both cases, the financial crisis emerged as a key motivation for change. In EquiGrow, participants frequently cited the crisis as a cause for accounting change, and the senior managers of SSI consistently rooted their strategy against competitors and against forecasts of market position and financial recovery.

Thus, aspects of the crisis, to some extent, were internalised into both organisations through managers, and this facilitated the adoption of several VCMA techniques as senior managers linked VCMA to recovery, as the techniques adopted were thought to be fruitful in uncovering sources of potentially unrealised value, as well as identifying processual inefficiencies.

It is here that agential concerns emerge, as managers presented some traditional features of their existing accounting system as having the potential to hinder financial growth - a logic which was frequently repeated by employees in both organisations. But the newer versions of some techniques, such as the customer valuation metrics adopted, represented, at least for the managers, a way to stimulate financial recovery and positively contribute towards the stated aim of creating value. In this sense, compliance with the underlying logic of adoption can be interpreted as evidence of employees willingly enacting the structural constraints imposed upon them. For managers, the structural constraints were understood as being largely economic in nature, representing potential loss of competitive and financial position, and so structural influences were enacted by managers out of economic considerations. As above, however, it is possible to also interpret some of the change as representing an opportunity for managers to gain increased control over processes and thus indicating shifting power relations in both

EquiGrow and SSI, but such motivations were never actively acknowledged by managers in interviews.

For accountants at SSI the constraints affected the operation of the management accounting system and also their daily work routines, as changes entailed a greater degree of interfunctional cooperation. These changes, and their acceptance, points to the prevalence of the crisis narrative within in both EquiGrow and SSI, and also signals that the priority of recovery and value creation as a strategic response was so heavily emphasised that individual agential clarification of change was supplanted by structural explanations.

Another important agential concern is the role of resistance documented within each case study. For EquiGrow, claims processors rejected aspects of accounting change by cynically complying with, and hence subverting the purpose of, the newly adopted performance measurement criteria and KPIs; whilst in SSI resistance primarily took the form of exaggerating claims in PDPs. These moments of resistance are important for critical realism, and indeed management accounting research more generally, as they highlight the possibility of individual agents refuting change. Whilst employees in SSI and EquiGrow were willing to accept some aspects of change, techniques which brought a perceived negative change, in terms of additional and/or intensified workloads or the completion of cumbersome tasks were resisted or subverted through sardonic compliance, suggesting the presence of deeper explanations of change. Here, the agency of organisational participants in both EquiGrow and SSI became a major factor in demarcating the potentiality for accounting and organisational change; that agential power was demonstrated through forms of resistance suggests that structural constraints were not as overbearing in explaining change as the agency, and autonomy, of actors.

To some extent, however, agents were not able to express complete agential autonomy over their actions with respect to change, and in both cases it was clear that higher-level organisational participants had vested interests in the outcome of accounting change. Within EquiGrow, financial analysts and sellers were able to align their interests with those of senior and managerial employees through financial bonuses for meeting sales targets, and this emphasis on economic considerations impacted upon agential reflexivity as their behaviour eventually conformed to the structural constraints enacted by senior organisational participants, in that sellers and analysts accepted the changes designed to increase firm value and hence ease environmental pressures.

Nonetheless, the findings from both cases does suggest that agential action and reflexivity was an important factor in explaining management accounting change, particularly given the nuanced aspects of resistance to structural pressures in both cases, as well as the possible enhancements to managerial control that senior organisational participants could enjoy.

8.2: Further Analysis

Whilst some agents in EquiGrow and SSI experienced power shifts, and moved to protect their current organisational position, other agents may not and hence attempt to diminish the efficacy of some of the accounting changes. This was evident in both cases where resistance to particular techniques and accounting change was vocal. Thus, in a broad sense, the changes made to the accounting system within both EquiGrow and SSI may be understood as shifts in the socio-political contexts of each organisation, particularly as managers appear to gain most from the subsequent organisational re-ordering that stemmed from the implementation of VCMA.

In order to understand these issues in more detail, it is possible to engage with critical accounting literature to further analyse and explain aspects of these changes, particularly as areas of the critical accounting literature have demonstrated that the adoption of new accounting techniques can increase tension across the organisation, and is interpreted by some (Cooper and Hopper, 2007) as attempts to reinvigorate Taylorism.

Two areas that might be useful to explore is understanding of accounting as a social practice, and analysing the labour process changes brought about by the adoption of VCMA.

Briefly, these two strands of accounting literature can help to understand accounting as a mediator in social relations, and can be used to further explain agential tensions resulting in EquiGrow and SSI. Specifically that the extraction of information, and value, from employees and customers, and the increased burden of recovery placed upon employees in EquiGrow and SSI can be further understood by engagement with both sets of literature.

Studies that view accounting as a social or calculative practice postulates that accounting is active in driving, or shaping, social relations (Potter, 2005), whilst a labour process view considers accounting to be crucial to achieving control over labour (Bryer, 2006). In addition, linking issues of power, control and resistance with labour process insights may supplement the critical realist interpretation proffered herein (cf Fleetwood, 2005).

Engagement here also deepens understanding of the socio-political changes as a result of adopting VCMA in both EquiGrow and SSI, thus responding to the fourth sub-question of this thesis.

Yet further still, engagement with this literature can also examine wider socio-political changes as a result of adopting VCMA, and highlight how accounting, as a social practice, can shape not only organisational but social relationships, and hence by engaging with critical accounting project alongside critical realism, the fifth sub-question of the thesis, to evaluate the prospect for an emancipatory intervention, will be addressed.

8.2.1: On the intertwinement between calculation and management: how objects of analysis are presented

The attempts to value customers and employees presented in this thesis, have revealed that the focus has shifted from notions of customer accounting (that is determining customer profits) to customer valuation (or valuing the future stream of revenue from customers), which has led to a perceived gulf in the literature between accounting and marketing in their treatment over customer value (Guilding and McManus, 2002; Weir, 2008). Customer Equity concepts, which depend upon valuation metrics, threatens to increase this gulf regarding customers. But, from an accounting perspective, customer valuation techniques, specifically CE, are closer to accounting logic than the literature concedes.

And in the case of employees, shifts have been documented from concepts relating to customers as assets (through early attempts to include them on the balance sheet) to notions of employee worth (through wider use of softer information) to capturing creativity and individuality (through related attempts in IC and HRM metrics). This presents HR managers with a series of “boxes to tick” regarding performance measurement, and leaves little freedom for employees to explore their role in the organisation, despite the potential of intellectual capital reporting in exploring concepts of employee value.

In seeking to rectify contemporary concerns over financial accountability (Rust *et al.*, 2004), marketers have created a model of Customer Equity that measures the impact of investment in marketing strategies, and thus provides a platform of visibility. It is through such a platform where the manager is held accountable for their marketing investments and decisions. Accounting imbues an object with properties, which creates visibility (Burchell *et al.*, 1980; Miller and O'Leary, 1987; Miller and Napier, 1993), and hence accountability (Miller and O'Leary, 1987; Catasús, 2008). Customer Equity models provide visibility and accountability just as SC provided such a platform in managerial accounting theory (Miller and O'Leary, 1987). Thus the financial calculus of CLV appraisals and Customer Equity models readily embraces the reliable type of information furthered by traditional management accounting techniques. Whilst this managerial calculus has proven successful in controlling and managing enterprises for many years (*cf.* Roslender and Fincham, 2004), its application in a marketing context is certainly attractive. But this calculus has also been questioned and heavily criticised in the managerial accounting literature (Cooper and Hopper, 2007), and will be returned to later.

However, from an accounting perspective the CLV metrics are more representative of modern financial appraisal models as opposed to TMA. Perhaps because marketers are not tied to the same rules, conventions and processes that accountants are tied to, they are able to develop a numerical stream of research in customer valuations. This could explain why, in the literature, accountants are more comfortable in accepting ABC-type calculations of customer profits, instead of the alternatives offered by marketers. Furthermore, viewing customers, and to an extent employees, as assets has allowed marketers to develop notions of CE, and thus further customer valuation linkages with financial calculus, and for companies to develop metrics for measuring firm worth as a result of employee creativity trapping them and their 'essence' within the managerial rationale of performance measurement. For an accountant, however, customers and employees cannot be viewed in such a fashion, as an 'asset' is synonymous with financial statements; a place where people are not allowed to be expressed. To recapitulate the related debates in the accounting literature several attempts have been developed to place people on the balance sheet (Roslender and Fincham, 2001), but these have ultimately proved fruitless with regulators and professional bodies, with common criticisms pointing to the lack of a reliable financial measure (Flamholtz, 1999) as well as a lack of ownership and control.

However, from a critical outlook, viewing customers as assets, and employee worth and creativity as measurable, creates a space for treating or viewing both as an asset. By delineating such a space, the possibility for viewing customers and employees as a liability is also presented. This was the case for HR accounting practices in EquiGrow, whereby the costs of setting employee-training schemes were seen as expenditure and liabilities in the accounts and not investments. Thus in the context of employee reporting, it is possible to present employees as a liability, and similar conceptions are possible with regards to customers. Viewing customers as a liability is problematic as it may make it easier for firms to terminate relations with them, as a liability is a financial conception often depicting something as undesirable (Boyce, 2000). Emphasis is now given to customers in the following sections.

8.2.2.1: Customers as commodities: Consequences of economic rationalism

Throughout the processes of customer accounting and valuation, customers are continually conceptualised as profitable, unprofitable, valuable, loyal, disloyal, assets, desirable, and ultimately tradable as commodities. Whilst the notion of customers as tradable has existed for numerous years in the marketing literature (see, for example, Levitt, 1962), contemporary terminology and usage of 'value' within metrics presents another dimension to the analysis (*cf.* Boyce, 2000).

To elaborate; when placed in a situation where material wants outweigh means to achieve them, a human subject will assign their means to the extent that the additional utility gained from the satisfaction of each want is equal in proportion to its cost across all wants (Shearer, 2002). Thus wants are weighed against each other and a rational allocation of means to satisfy wants occurs. This theory of rational utility maximising behaviour forms the basis of modern economic theory (Barber, 1967). Shearer (2002) has voiced fears that economic rationalism may colonise non-economic situations of daily life, such that this utility maximising rationality will pervade non-economic aspects of human life. As a consequence of this, humans would see themselves as self-interested utility maximisers, and even human relations become subjected to economic rationalism.

Shearer (2002) extends her analysis to consider the concept of value. She posits that value is an intrinsic property and is only defined when something is sought or desired, to the ends that value lies in the satisfaction of desire. Furthermore, seeking 'value' reduces the 'other' to be a "mere object to be appropriated in the service of the desiring subject's wishes" (554).

In the context of this thesis, customer valuation metrics, for example CLV calculations, subject customers to the same objectification, in that customers are reified thorough the calculation process and are (re)ontologised as a financial number which is then placed into value hierarchies. By conceptualising the firm as a self-interested utility maximiser, the customer becomes an object to be acquired to sate desire of the firm; per Shearer's analysis, the "other" is commodified through this process and, in the context of this thesis, the customer is commodified. Consequently, customers are viewed in economic terms and are dehumanised through the process of commodification; the result being that customers merely exist to increase the utility of the firm.

Even customer loyalty, which formed an important conceptual base for the development of metrics both in theory and in EquiGrow, is based on self-interest, because loyalty is presented by many writers (for example see, McDougall *et al.*, 1997; Rigby *et al.*, 2002) with a managerialist emphasis and is often communicated as at the centre or foundation of business growth, providing, for example, future revenue streams. Within EquiGrow, financial analysts and case advisors framed customers within this framework of growth, and the senior accountant also expressed this notion of customers as the centre of the business. Accordingly, alternative conceptions of customers, such as loyal customers, still stem from the same economic reasoning that customers are objects to be desired to increase shareholder wealth. This is a far cry from the rhetoric that 'the customer' is the most important person in and to the organisation (*cf.* Boyce, 2000).

8.2.2.2: Over-arching shareholder value: (mis)Management at a distance

By conceptualising the reviewed techniques as a system of accounting, customers and employees become imbued with properties that are rendered visible (Catasús, 2008) and captured in abstract terms as accounting numbers. On customers, Andon *et al.* (2001) fear that, due to the abstraction of customers as numbers, management might decide to control customer relationships based on the numbers that are generated as a result of valuation processes. If this management by numbers takes place then any human contact with customers is removed. Ergo, these metrics could engender a sort of management or controlling from a distance by those who do not achieve regular contact with customers (Andon *et al.*, 2001). Furthermore, it has been suggested that accounting numbers create an objective knowledge that is difficult to challenge. The 'facts' created by accounting prioritise the economic rather than the social, and as a result, customers would be further represented in economic terms.

This management by numbers that is engendered by valuation metrics is contrary to central propositions in relationship and retention managements, where the aim is to get closer to and getting to know the customer (Duboff, 1992; Treacy & Wiersema, 1993). To recap, underpinning the metrics are notions of a clearer understanding of the customer, which enables better management of the customer; however, the reality is more akin to a financial appraisal of customers in order to determine which are valuable and thus deserving of attention. What follows from this is the creation of value hierarchies, where customers are grouped according to their profitability: a 'Loyal' grouping for profitable and potentially valuable customers, and a 'Disloyal' grouping for unprofitable customers. This loyalty dialectic is then used as the basis of constructing a customer portfolio (Dhar and Glazer, 2003; Van Raaij *et al.*, 2003) where the company creates a customer base akin to a portfolio in which customers are included on their potential contribution to shareholder value.

As above, the emphasis of CE is on increasing firm and shareholder value, despite notions of customer value being at the heart of CE and CLV techniques. There is an inherent tension between customer and shareholder values (Bourguignon, 2005), with value being extracted from customers and reassigned to shareholders. This was evident during EquiGrow's usage of CLV calculations, as value created from customers was valorised as a return on investment to shareholders through increased shareholder wealth, in addition to bonuses for both senior management and financial policy sellers.

Calculative procedures, such as ABC, can abstract knowledge into objective knowledge that can then be used in power struggles. Walker and Mitchell (1996), for example, demonstrated that costing can be used to advance employer interests over unorganised customers. Jeacle and Walsh (2002) studied accounting and its use in consumer credit in department stores in the US in 1920s and 30s. They found that accounting replaces local knowledge when granting credit. In this case, power transferred from credit clerks to systems of 'knowing the customer' (Cooper and Hopper, 2007). However, in ‘knowing the customer’, accounting numbers are often constructed where customers and customer service are calculable and subject to organisational needs (see Ogden, 1997). To elaborate; accounting measures can change according to political relations prevalent at a particular time; in the context of theoretical developments, characteristics, purposes and conceptions of the customer can be affected (Cooper and Hopper, 2007; Skaerbaek and Melander, 2004). This process did indeed affect customers in EquiGrow.

During follow up interviews at EquiGrow, it transpired that some claims processors had changed their attitude toward customers, citing that “[the client’s] should know what they are getting into when they sign any paperwork” (CS3, Sep 2009), with regards to any fall in value of their investment. Across time, customer service employees began to feel less and less, or at least not connect on a human level with the customers and that they identified them merely as the system does – as a number. Advanced metrics and prolonged use if the measurement system had meant that customers became quantifiable, and hence employees viewed them in the same regard as a number. Some of this shift can also be attributed to the “turnaround time” policy of the company, as increased pressure to close customer queries and respond to specific issues relating to customer policy calls, meant more time and effort was spent on specific customers, whilst others were neglected and “fobbed off” onto someone else “down the chain”, such that an implied value hierarchy meant that privileged customers or valuable ones were given more “turnaround time” despite the policy in place, as they felt that they couldn’t lose that customer, or that any negative effects of strictly following the policy would outweigh the additional time and effort taken to resolve the customer’s issues. This suggests that one possible overall effect of extending CLV metrics to enhance company value is the presence of tension with, or even resentment to, customers.

Similarities exist in SSI over the prolonged use of HR measures in encouraging accountants to fulfil strategic objectives by increasingly relying upon PDPs, and in this case a management by numbers emerged whereby less was known by managers about the shifts in job roles and responsibilities, as KPIs were emphasised as a means of judging performance. This, invariably, manifested an attitude of resistance in accountants at SSI who would play creatively with their journals and artificially inflate or deflate KPIs. As Power (1994) articulates calculative practices have an inherent capacity to rationalise behaviour. When viewed through the lens of a hierarchy of value, PDPs similarly create expectations of better employees through incentivising

PDP completion; this is seen as a reward for ‘better’ employees and through the language of CRM, an employee ‘loyalty’ is rewarded. A larger concern emerges as these schemas can also be seen to legitimate deep employee commodification through the deployment of softer metrics capturing previously uncaptured work processes. This point, however, is covered in more depth later.

Therefore, given these revelations, and reference to the issue of commodification, the espoused linkages that current marketers claim with relationship management are negated. To elaborate; the valuation metrics may engender a portfolio view of customers and relationships to such an extent that relationship management as a management tool and as a management ideal is not possible, because the management of customers is loosely based on a portfolio of profitable or ‘loyal’ investments. Furthermore, the effects of ‘getting to know the customer’ implicate them in political struggles, where they can be (re)conceptualised according to organisational needs, priorities and subjected to the needs and interests of capital – such as the changed role in EquiGrow where sellers’ bonuses were also linked to strategic aims and objectives of the organisation (see section 8.1.2). Again this goes against the aim of relationship management to improve customer satisfaction.

Perhaps the most prominent observation that can be made regarding the developments in customer accounting and valuations is the failure of researchers to envisage it as a social practice.

In addition the above critical analysis has demonstrated that customer valuation techniques construct value hierarchies which further marginalise specific customers or customer groups such as the poor or disabled, and consequently as a marketing technology, they are not politically neutral. However, this point is not readily apparent within the literature.

Moreover the majority of published research appears in the area of customer accounting and valuations are explicitly technical in focus, presenting either a case study with some calculations and a conclusion on the benefits of a particular technique (for example, see Cooper and Kaplan, 1991), or containing examples of data and working through several different and increasingly intricate formulaic calculations (for example, Gupta *et al.*, 2006). As a result of this technical focus, the literature ignores any social implications of using these techniques or at the very least, research articles gloss over such implications. Within critical areas of accounting, researchers have considered that calculations can lead to a marginalisation of the disadvantaged (see Tinker, 1985), create a space in which a person can self-regulate or govern themselves when under the scrutiny of measurement (Miller and O'Leary, 1987; 1994; Miller and Napier, 1993), and even play an active part in labour conflicts (Hopper and Armstrong, 1991). More generally, within organisation and management studies the notion that calculation and technical procedures create objectivity (Feldman, 2004) that is often use to legitimate management activity. Therefore, it is disturbing that, given this pre-existing literature, few articles within the literature consider the social implications of customer accounting and valuation techniques. Thus, attention will now be drawn to some of these implications below.

8.2.2.5: Social Implications of customer accounting/valuation

Originally, a range of non-financial and financial information about the customer was previously utilised in order to provide areas of customer focus (Boyce, 2000). Tools used to achieve this included customer surveys and focus groups. However with the rise of customer databases (Boyce, 2002), the information and the opportunity exists to exploit CLV and CE calculations in order to target more potential customers, which also encourages an increase in the use of such metrics. Hence there is a greater likelihood of customers being managed according to the results of valuation calculations.

Expanding upon this concern, customer valuations and subsequent customer targeting and retention and marketing strategies are already seen to be having effects in business areas as diverse as health insurance provision (Boyce, 2000; Andon *et al.*, 2001), gas and electricity provision, and telecommunications and internet service provision (Boyce, 2002). The effects of customer valuations have also been seen in a range of basic financial services such as credit provision and bill payment services (Carbo *et al.*, 2007). The common finding amongst each of these sectors is that customer profitability calculations and valuations are leading to a split in the customer base where richer customers are privileged with better access and exclusive offers. This is evident from the literature on banking, where Boyce (2000) has noted that resources are reallocated to more valuable customers.

Within the literature, it has been found that banks regularly conduct customer profitability calculations and retain more profitability customers, whilst trying to transform unprofitable customers (Andon *et al.*, 2001; Cooper and Kaplan, 1991; Reichheld, 1996). Accordingly banks are refusing to deal with poor or disadvantaged customers; however, in today's environment, banking is a service that most people, regardless of social or economic background, depend upon, thus the refusal by some banks to transact with poorer customers could lead to their alienation from the banking industry (Carbo *et al.*, 2007; Weir, 2008). However it is likely that banks will not risk negative publicity by firing customers, so they might be more inclined to discipline unwanted customers by imposing high charges and fees (Boyce, 2000). In addition, target marketing which results from the identification of profitable customers (Boyce, 2002) could see richer customers being offered exclusive services and products, whilst poorer customers are likely to be offered substandard services. This would only serve to further the alienation of particular customers or customer groups.

In addition to the alienation faced by some customers, Boyce (2000) also noted that some general potential social consequences of customer accounting and valuation schemes include alienation, financial exclusion, and marginalisation of disadvantaged customers. Furthermore, Carbo *et al.* (2007) point out that financial exclusion is often the case for low income customers in the financial service industry.

By further problematising distinctions across practice, EquiGrow and SSI have utilised VCMA metrics of productivity with the rationale of goal congruence and the overarching aim of value creation. To briefly recap this position, SSI senior managers indicated that improved individual performances, as triggered by increased measures of performance, would lead to greater aggregate organisational performance, in that improvement to processes and improvement to employee knowledge can offer significant efficiency (and value) gains. EquiGrow senior managers indicated that financial and policy sellers would gain greater bonuses for exceeding sales and new business targets, and that gains in value here would be reflected in value gains for the organisation. However, these positions are problematic in that individual performance does not necessarily aggregate to company performance. Under the theory of the firm it is assumed that an organisation will maximise their profits and utility and that aggregate performance across the industry will equate to an aggregate social benefit. Similarly doubt can also be cast upon the assumed nature of aggregated organisational benefits from collected individual performance, since gains at the individual level represent a claim against value creation.

In a value context, what emerges as value creation for individuals might jar against notions of collective value creation as both parties (at the individual and collective levels) have differing claims over the wealth or value created. In addition, as Marazzi (2008) notes, individual rationality contradicts collective rationality, by way of example, he advances a situation of selling financial commodities noting that individual rationality stresses that selling should occur at the peak of value increase, but the collective rationality that is espoused to arise from aggregate selling is contravened as if all individuals sell at the same time there are no buyers and hence no collective action. For the purposes here, collective rationality based upon aggregate individual actions is not necessarily the case; a situation based upon having only valuable customers might destroy the customer base to such an extent that collective terminologies over what constitutes valuable are eroded because either the firm is trading severely under-capacity, or that notions of value are negated by their own rhetoric in that without a base for comparison, can such a valuable customer group exist?

Since VCMA can be seen to exacerbate some underlying tensions, in that issues of capital dominance still exist, then there is scope for an emancipatory and critical intervention.

As Bhaskar (1986; 1991) has noted, by focusing upon causality and the mechanisms and structures of change, researchers are able to gain an insight in such casual mechanisms which engender negative, or for the purposes of this thesis repressive, aspects of change. In exposing these conditions and through an exposition of what drives change, Bhaskar (1991) claims social scientists are in a privileged position to prescribe emancipatory change:

"If one is in the possession of a theory that explains why false consciousness is necessary, then one can pass immediately, without the addition of any extraneous value judgment, to a negative evaluation on the object that makes such consciousness necessary and to a positive evaluation on action rationally directed at removing it" (1991: 156)

Bhaskar (2009) has furthered this position by focusing on the explanatory critiques provided by social science, in that emancipation is "causally presaged and logically entailed by explanatory theory" (2009:xxviii), such that explanatory theory and emancipation are spirally linked, where "science informs the values and practice of emancipatory movements/politics, which in turn motivate science - a notion that links in to the elaboration of the dialectics of freedom in *Dialectic*" (ibid, italics in original). Lacey (1998) reflects on these ideas and considers that if the outcomes of research reveal negative (or repressive) phenomena and if the researcher does nothing in curtailing this phenomena, then "the negatively valued phenomena...will remain in place or might even be exacerbated. We cannot evade the dialectic of social change and gaining knowledge" (1998: 491). Coming full circle on the issue, Lacey (1998) further stimulates the inclination toward an emancipatory impulse, which has also been stressed as important by some critical realists (Cruickshank, 2003; Lawson, 1999).

However, CR as the underlying framework of this thesis has been criticised for lacking a more convincing emancipatory view (Willmott, 2005). Criticism has been attracted from varied sources and each commentator attempts to denigrate the emancipatory goal of CR from their own perspective; such that feminists view CR as patriarchal in its attempts to signify change, claiming that intent is not deep enough (Barker, 2003). Nonetheless these are all valid concerns and it is hoped that by engaging with critical accounting projects, that some criticism can be rebutted.

8.2.3: Alternatives with an Emancipatory Intent

In proposing alternatives to contemporary accounting and valuation techniques insights are gathered from the critical dialogues within the accounting literature.

In their book, *Emancipation and Accounting*, Gallhofer and Haslam advanced the cause for emancipatory accounting by arguing that accounting simultaneously exists as a repressive force and as an emancipatory potential. In particular, they claimed that critical accounting discourse portrays accounting as "negatively repressive" (2003:3), which encourages a general negative perception of accounting. They feel that an emancipatory accounting has the potential to view accounting differently and to balance critical accounting discourse, consequently altering negative social perceptions of accounting. Furthermore, such a project promotes a positive relating of accounting and emancipation.

Prior to the publication of the above ideas, an earlier discussion reflecting broadly upon the critical accounting project hinted at an emancipatory solution. Enabling accounting was developed from a debate in 1997 regarding the perceived failures of the critical accounting project, which was argued to have been in a rut (Gallhofer and Haslam, 1997; Broadbent *et al.*, 1997). Articles particularly pointed out the reluctance of authors to propose solutions, and enabling accounting was promoted as a return to a normative stance. Also contained within this discourse were six elements deemed to promote an emancipatory and enabling accounting (Gallhofer and Haslam, 1997; Paisey and Paisey, 2006a, 2006b). Firstly, accounting is to act as a force for radical emancipatory social change. This is achieved through making things visible and lucid whilst helping to engender dialogue and action. Secondly, critiquing the social structure, countering institutional constraints and contesting hegemonic interests are aimed at enhancing accountability. Thirdly, enhancing the content and form of informing and sharing insights. Fourthly, the needs of repressed groups, such as the poor, disabled, indigenous peoples and children, would be addressed. Penultimately, the impact of potential accountings upon people is theorised and finally prescribing by outlining a vision and how an enabling accounting could be advanced.

Leading from these ideas, Moerman (2006) evaluated the possibility of a theologically informed critical discourse. Specific attention was drawn to her views on constructing an accounting Orthopraxis, which has a heterodox purpose. That is to write that Orthopraxis is aimed toward constructing accounting that seeks social betterment, as opposed to constructing accounting that seeks betterment (or progressive technical enhancement) of accounting technologies.

An recent issue of *Accounting, Auditing, and Accountability Journal* focused on internet reporting and several articles (Gallhofer *et al.*, 2006a, 2006b; Paisey and Paisey, 2006a, 2006b; Sikka, 2006) debated the construction of a system of counter-accounting, whereby existing accounting information is used in a contradictory purpose in order to challenge or counter existing hegemonic positions (Gallhofer *et al.*, 2006a), and to promote alternatives to existing status quo (*Ibid*). Inherently, this approach has much in common with the methods used by campaigners and activists (see, Gallhofer and Haslam, 2006a) in that both challenge contemporary power relations (*cf.* Sikka, 2006).

Thus from the recent debates in critical accounting, notions of emancipatory accounting have emerged. From the above brief reviews, three potential streams of alternatives have arisen: Enabling Accounting, Orthopraxis, and Counter Accounting. Each of these will now be evaluated in order to suggest the prospect of providing alternatives to contemporary customer valuation metrics.

8.2.4: An Enabling Solution

As above, enabling accounting is concerned with the promotion of other voices in accounting, and perhaps a solution derived from these underpinnings represents the greatest emancipatory potential. When accounting is constructed, a presence is created that is visible and audible (Catasús, 2008). Yet, at this stage of development, it appears customers are captured only through the gaze of accounting. Ergo there exists a broad potentiality in creating a metric or system whereby customers are audible. Roslender and Fincham (2004) conducted research in intellectual capital and posited that intellectual capital fell within the trappings of calculus which was intertwined with managerialist intentions. They proposed intellectual capital self-accounting as an emancipatory solution (see also Roslender and Fincham, 2001), whereby employees would write blogs of their experiences within a firm. Such an idea stemmed from the idea that accounting could be conceived as a system of 'story-telling' and built upon narrative approaches to reporting intellectual capital information to interested parties.

IC self-accounting has an emancipatory interest and a practical interest that is rooted in language and communication, specifically interests that are based upon Habermasian notions of communicative action. This is differentiated from what Roslender and Fincham consider to be strategic action which appropriates toward an orientation of success, whereby activity is designed in the pursuit and the achievement of goals. Since IC reporting falls within normative and managerialist trappings, Roslender and Fincham felt that any information yielded from such reports were not indicative of open communication; instead they represented strategic action, where the emphasis on measurement places intellectual capital as subservient to the interests of managers.

For Roslender and Fincham, they sensed that the solution lay in a re-imagining of the underpinnings of IC reporting. Since IC reporting was presented in a normative fashion it would encourage managers and users of accounting information alike to treat IC, and hence employees, as a resource to be measured, managed, maximised and ultimately controlled through accounting metrics; however by conceptualising the underpinnings in an emancipatory fashion, through the Habermasian notions of communicative action Roslender and Fincham described the potential for self-accounting to allow employees to share their organisational experiences in a fashion that is largely free of managerial control, or at least free of being trapped by managerial metrics. This they felt would also be of benefit to the organisation as it would enhance the value of IC reporting because communication is assumed to be freer without the intervention of organisational strategy or managerial intent driving the content of reports.

Whilst strategic action has an affinity with target-oriented achievement of goals, information relating to this form of social action is seen to be distorted and subject to manipulation, communicative action is social action aimed at reaching an understanding between speaking participants; consensus is deemed to be mutually beneficial. It is this focus of openness and self-awareness through communicative action that Roslender and Fincham have rooted in IC self-accounting.

A similar approach could be applied to customer accounting. Indeed, Roslender and Hart (2010) advance such a model for customer self-accounting, whereby customers are given a domain in which to speak, which curtails the problems within the literature over managerial control and deeper commodification of customers. In EquiGrow, customers were being viewed as a number by employees and within the literature CLV metrics are stated to encourage a hierarchy of value, which is evident in the shift in the attitude of processors toward customers in the EquiGrow case. By following a customer self-accounting, this would allow customers to recount their stories and experiences, and promote a voice that has been missing in previous attempts at customer accounting – ironically the customer. The key idea is that customers are given a space to speak for them, which distances them from the calculus that captures them as a financial number, which is then subject to action by management. In this way the customer becomes audible and a new voice in the practice of customer accounting will be heard.

Customer self-accounting is also tied to recent notions within the marketing literature of a working customer (Cova and Dalli, 2009) as theories behind the working customer stem from immaterial consumer labour. Whilst material labour captures physical labour that is involved in making commodities, immaterial labour refers to the labour that produces the cultural and informational content of commodities (Lazzarato, 1996); that is to say, that labour processes have been altered as a result of increased usage of informational systems and computerised technologies to such an extent that the skills of labour required for commodity production include so-called softer or cybernetic skills that are necessary for production and organisational communication. Furthermore, cultural content refers to shifts and changes in cultural attitudes to aesthetics and taste, so that labour includes an immaterial component (not normally regarded as work) where workers are required to perform activities that maintain or define cultural standards. In this context, a common example is proffered by Hardt and Negri (2000) who note that the idea of ‘service with a smile’ is part of immaterial labour. Within marketing, immaterial consumer labour might refer to the immaterial practices of customers in enhancing the commodity that they have purchased from an organisation, such that they become involved in the production process and become working consumers (see Cova and Dalli, 2009). Examples include Amazon, which promotes and actively encourages product and seller reviews by customers. In this sense customers are serving other customers and act simultaneously as a source of labour for the Amazon, through the contribution of product reviews, and as a source of value. In addition McDonald’s customer are encouraged to separate their waste into separate waste categories and dispose it accordingly; an act of consumer labour that has been estimated to be worth several billion Euros per year to the German economy (Zwick *et al.*, 2008). Thus there is an element of value creation placed in the act of immaterial labour, in that upon rehearsing the role of the working consumer, value can actually be (indirectly) attributed to a good or service that represents gains in value for both consumers (through enhanced satisfaction which increases customer value) and for organisations (through realised gains in value), and this dual value drive has been referred to as the co-creation of value (Cova and Dalli, 2009) which was mobilised as a key theoretical underpinning in advancing customer self-accounting (Roslender and Hart, 2010).

Under the joining of these theoretical positions, there exists potential to re-envisage the purpose of customer accounting, in order to make it more narrative in execution and to provide or delineate a space through which customers can recount their experiences with the organisation in order to both act as a working customer (thus providing value to the organisation) and a co-creator of value. The key for self-accounting is that customers are given voice to enable their own experiences to be recounted which avoids the trap of managerial control through valuation metrics.

As with IC self-accounting, the working customer concept can also be further enhanced through the use of (micro)blogging. For instance, the literature points to more recent examples of companies using blogs to promote customers and enhance their customer experience (see Cova and Dalli, 2009, for a review). In the context of self-accounting and the working customer, this has delineated a space through which customers can enhance their own opinions of, and experiences with, the products of an organisation, and in so doing they can give voice to concerns. Equally, comments sections on news media sites have also been set up to allow customers to enhance the content of articles. This has been a successful model at the guardian that a "comment is free" section[11] has been launched which encourages opinion pieces on a wide range of issues and writers of articles engage in a dialogue with readers who attach their opinions and reflections on these pieces. Whilst these situations are not ideal in elaborating the concept of customer self-accounting, they do provide some context in which developments have been grounded and operationalised.

Therefore, this particular solution could conceptually provide an alternative to the domination of marginalised customers, as specific customers, regardless of social and economic circumstances, would be invited to recount their experiences. However, censorship of these self-accounts might be an issue (Roslender and Fincham, 2004), and might otherwise reduce the emancipatory potential of such an accounting. This issue is explored in more depth towards the end of this chapter.

8.2.5: A 'right' solution

Turning to Orthopraxis and the idea of doing what is right (Moerman, 2006), the largest concern within customer accounting is that customers are commodified.

Miller and O'Leary (1993; 1994) posed a radical and general solution to the commodification of customers formed during their experiences at Caterpillar. In presenting the 'politics of the product', they sought a redevelopment of existing manufacturing arrangements, whereby manufacturing was to be envisioned through the eyes of the customer. A privileged role in this process is given to the customer, where the customer is invited into the firm and, in the case of Caterpillar, new techniques focused on quality were introduced in order to increase customer satisfaction. Central to this idea is that traditional modes of accountability, i.e. financial accountability, are to be replaced with accountability to the customer. Ultimately the solution posed is what the writers feel is the right thing to do. It is their Orthopraxis. Whilst their work at Caterpillar was deemed to be theoretically and methodologically controversial (Armstrong, 2002; Cooper and Hopper, 2007), it nonetheless provides an avenue for emancipatory action, particularly as the role given to customer accountability means that organisational hierarchies are inverted and power relations shift so that the customer becomes empowered.

[11] http://www.guardian.co.uk/commentisfree, last accessed 13 February 2012

Leading from Miller and O'Leary's initial musings, it is possible to propose an Orthopraxis whereby focus is taken away from the financial. As above, within the realm of customer accounting and valuation, attempts at creating customer value are merely attempts to identify value within customers and to extract value to increase shareholder wealth. Such an exercise is consistent with the hegemonic interests of capital (*cf.* Bourguignon, 2005). Conceptually, then, *providing* value to the customer would be the right thing to do. That is to write; providing customer value constitutes our Orthopraxis, instead of current attempts that extract customer value.

Building on the idea of audibility, customers of all social and economic backgrounds could be invited into the company and asked a series of generic questions about the products or services that are offered. In line with the agenda of Miller and O'Leary, a series of measures regarding the product could be developed. Here, emphasis is placed on customer satisfaction, and concerns the role of the company in meeting the desires of customers in order to satisfy them. Marketers may learn what the customer wants, and accountants could construct appropriate costs in achieving the customers' stated wants, as well as communicating these with marketers and management. This sort of task would merge accounting and marketing insight because it requires the input of both marketers and accountants – thus it could yield deeper insights by facilitation the co-ordination of both departments, which has been claimed to be a source of competitive advantage (Roslender and Hart, 2004). The focus of this co-ordination would be placed upon translating customer-based measures into tasks that the company must do in order to meet its customers' expectations (*cf.* Kaplan and Norton, 1992). In this sense, value would be created for the customers through the company's ability to learn and improve; value is also linked with company value (Kaplan and Norton, 1992). In other words, through the capacity to launch new products, a company can create more value for customers; this in turn facilitates entry into new markets and provides an opportunity to increase revenues and margins, thereby increasing shareholder value (*cf.* Kaplan and Norton, 1992), but without extracting it from customers through the use of valuation metrics.

Therefore within this envisaged Orthopraxis, there exist potential benefits for the company as well as the customer. Capturing the spirit of Miller and O'Leary's (1993) "New Economic Citizenship", and promoting emancipatory aims, the marginalised customers are now the focus of the company's efforts and are no longer subject to the alienation imposed on them through the decisions spurned by calculative procedures. New power bases would result from the lack of calculative technologies (*cf.* Miller and O'Leary, 1993), and all forms and types of customers would be placed at the heart of operations, which would represent the complete emancipation from the prison of customer valuations.

8.2.6: A counter-solution

Finally consideration is given to Counter Accounting. As above, this form of accounting is used to highlight hegemonic or dominant political positions. Consequently, such an approach might not be pragmatic in that constructing an emancipatory customer metric is not the main aim. In their evaluation of pensions accounting, Paisey and Paisey (2006a) examined the contents of annual reports and the web sites of the FTSE 100 for data relating to their occupational pension schemes. Disclosures of key words were then examined according to the dimensions of enabling accounting identified above. It was subsequently found that the emancipatory potential of pensions accounting has not yet been realised and that companies' actions are motivated or driven by the market.

Hence within the context of customers, such an approach would not yield a pragmatic solution. However it be mobilised to promote a general awareness of some of the issues surrounding customer accounting and valuations. Specifically, by examining the information disclosed by companies, people could be readily informed regarding how customer data and information is used. Consistent with the methods and aim of Paisey and Paisey's use of counter accounting, a framework for the emancipatory usage of information could also be constructed with the intention of developing a database of sorts which documents how companies use existing data, in particular, rating the extent to which enabling action is taking place. Such a framework might focus on the extent of access given to customers, and details of any positive action taken to integrate marginalised customers or customer groups.

Furthermore, in line with Gallhofer *et al.*'s (2006a) recalling of the use of customer accounting, a consumer watchdog or corporate watchdog could be conceived that would place the customer at the heart of the analysis. Upon its inception, such groups could detail some instances of, for example, the culling of customers due to valuations. This could lead to a state of enlightenment regarding the issues of customer accounting and valuation. Whilst not readily being a liberating solution, this enlightenment would be a necessary pre-condition to emancipation (Dillard, 1991), in that enlightenment provides the necessary awareness to encourage empowerment, which then gives rise to emancipatory action (*Ibid.*). Within this alternative, existing information could be used to reconstruct accounting and tell a different story or 'give an alternative account' on how customers are being excluded from organisational access due to these valuations. A system of customer counter accounting might also widely publicise cases of customer dissatisfaction.

8.3: Reflecting on self-accounting

Whilst the emancipatory suggestions noted above are based upon developments in emancipatory theory and critical accounting, it does seem that within the literature self-accounting has been discussed as a possible vehicle on which to base a real organisational alternative to metrics and calculative practices. Gowthorpe (2009), for instance, discusses the potential in advancing a self-accounting in opposition to limited models of IC reporting that stem from financial reporting models and logics.

The concept of the working consumer has appeared in variants of the marketing literatures recently as examples of consumers acting as co-producers of services and goods that they consumer and linked to this idea are conceptions of a co-creation of organisational value, as described above.

In a Habermasian fashion, Roslender and Fincham (2004) argue that self-accounting is representative of a wider openness as engendered through the intent of communicative action, in that communicative action promotes self-accounts and narratives of the employee experience (Roslender and Fincham, 2004) and the customer experience is reframed within a similar emancipatory discussion of customer self-accounting (Roslender and Hart, 2010). However, when discussing the supposed communism of the internet and the free access to communication, the political exceeds the philosophical (Negri and Scelsi, 2008), so negotiating access to blogs for co-creation purposes emerges as a micro-political concern, in that editing adverse customer's opinions is as likely an outcome in the process of self-accounting as marginalisation of poorly performing customers is in the calculative rationale of CRM practices. In the same way that numerically these customers are constitutive of Schumpeterian value destruction, linguistically adverse customer opinions would also be indicative of value destruction. Given the propensity towards communication in self-accounting, conceived through the notion of a working consumer (as Roslender and Hart, 2010) as an act of co-creation of value (*cf.* Cova and Dalli, 2009), immediately the consensus to be reached is defined in the terms of corporate strategy: to elicit customer opinions which drive increases in both customer and shareholder value. The success of Habermas' theory of communicative action depends upon participants' abilities to reach a consensus, and if this consensus is rationally motivated towards some end, the act of communication, or the speech-act as Habermas describes it (Habermas, 2000), is illocutionary. An illocutionary speech act can be illustrated in terms above, in that the outcome of such speech acts is to educe the listener to not only accept speech claims as valid, but to also voluntarily comply with them: here the blogging customer not only accepts the outcome (or illocutionary goal) of corporate speech acts to be an increase in shareholder value, but they voluntarily obey this logic in their self-accounts by reflecting upon positive customer experiences (the illocutionary effect). Immediately it can be argued that such speech acts are representative of strategic intent, as the open consensus of communicative action is rooted in the goals of the organisation. Indeed, Habermas (2000) considers illocutionary aims in the form of assertions to be parasitic to a communication of mutual understanding, and in a sense the philosophy of an open communication is superseded by the strategic (and political) aims of the organisation to maintain sources of competitive advantage.

In a similar manner, notions of communicative action inherently assume equal opportunities and equal access to speech acts from participants in that reaching a mutually agreeable consensus is based on a formative precondition of equality; this position does not address the contested balance of power in expressing speech acts which is a common point amongst detractors of Habermas' notion of communicative action. Kompridis (2006) details a more sustained critique of Habermasian perspective of communicative action and the underlying philosophy of communicative rationality, reiterating more consistent claims that Habermas' model of consensus ignores background influences and contexts that shape participants' perspectives. In particular, Kompridis attacks the two principles of a view from nowhere - the notion that a lack of alternatives are provided in reaching consensus - and rationalist emphasis stressed by Habermas in his understanding of consensus, as in their coupling, change in reaching consensus can be viewed as restrictive as transformative discussions lack perspectival or contextual viewpoints, and any alternative (non-rationalist) views are self-decentring; in the process(es) of reaching a state of normativity (or consensus in Habermasian terminology) encounters between the self and others dissolve into a wider endorsement of a dominant voice over and above the concerns of quieter voices. This last point revisits criticism by Flyvbjerg (1998) regarding the limitations of rationality and masking of unequal status quo: communicative rationality is seen to be contextual, and can often be mistaken for rationalisation, particularly as rationality is penetrated by power and the rational consensus being reached is more akin to a maintenance of (powerful) interests than as free discourse engendered towards mutual consensus. A number of contextual factors are not acknowledged within the theory of communicative action, such as non-rational rhetoric and the relation between participants, which can steer consensus away from mutual interests and it is here that rationalisation occurs. For Flyvbjerg, rationalisation is a strategy of justification, which, through his invocation of Nietzsche, can border on self-delusion but nonetheless pervades reality and allows power to be asserted as a dominant interest in communication.

Given these criticisms of communicative action and communicative rationality, any model of employee reporting or customer self-accounting, whilst well-intentioned, might also duplicate the same masking of unequal social relations, such that the risk of further alienation and marginalisation of both employees and customers is not mitigated fully.

In a sense employee reporting involves some sort of image management by the organisation, in that employees reporting about work on their personal internet space are subject to discipline for their (negative) opinions[12]. Furthermore owing to potential sensitive information being leaked or exposed through employee blogging, firms might invoke legal principles to protect their data, and so on; the logical conclusion of which is that employee blogs would be heavily edited to censure potentially legal infringements or defamation. For Habermas (1970; 2000) the philosophy of discourse as an open communication carries basic rules, but in the editing process of self-accounts and blogs, working customers and employees who oppose corporate practices would be denied the right to practise these rules for discourse, as editing would remove the pragmatic presupposition that any participant in discourse has the freedom to introduce

[12] Whilst this point is not fully elaborated here, one can get a sense of how employees are censured or disciplined for negative remarks on social media by visiting sites such as http://www.lamebook.com/, where posters can upload screen captures of incidents involving employees posting comments about their job and their boss, who is connected to their social network, posts a disciplinary response. Site last accessed 28 December 2012

any assertion whatsoever into the discourse. Instrumentally, editing can be viewed in this manner as, at worst, deliberate attempts to remove any counter points to corporate dialogues of value creation, which places corporate activities above genuine empowerment initiatives of communicative action. The notion that the practice of politics supersedes the aims of philosophy is rehearsed here.

Roslender and Fincham (2004) discuss the possibility of blogging as a platform for which to practise self-accounting. Interpreting this within the framework of the working customer is problematic for the reasons sketched above. Blogging off-site would, however, act as an ideal vehicle for adverse or counter self-accounting as the rise in blogging carries important political implications in that open communication is enabled through blogging. Scelsi captures this intent with his discussions with Negri: "the modality of open publishing" (Negri and Scelsi, 2008: 63) which is present through internet publications, "has allowed us to discuss and criticize in an absolutely nonvertical way" (ibid). In this sense, engaging with a more political orientation might provide a more open platform on which emancipatory communication might be reached, as the constraints and strategic intent of corporate speech acts are avoided and to some extent subverted. Fundamental informational and communicative flows, and crucially their control, can be negated.

Furthermore, the ideals of communicative action and the ideal speech situation, at the heart of self-accounting, have been critiqued at length elsewhere. Kellner (1997) for instance conflates the notion that audiences of ideal speech situations are not completely passive; specifically the audience, as members of a social community, is given agency to produce their own meanings as a community of communication. Bringing this within the confines of a capitalist community, the speech act might encounter resistance of systematic distortion.

Thus, there are two immediately recognisable forms of self-accounting: a more philosophical conception stemming from Habermas and related insights from the working consumer. This form of self-accounting is philosophically emancipatory as customers are empowered through the preparation of self-accounts for the co-creation of organisational and customer value.

However, this is equally problematic, as this process, in conjunction with the notions of VCMA and CRM imply a politicisation of communication, as outlined above, which challenges the openness of communicative action as rehearsed through self-accounting. Furthermore, construing the customer as a working customer poses deeply unsettling consequences as this relationship also entails a (re)classification of immaterial labour as material, engendering a deeper reification of relationships with the organisation. This position is now elaborated through insights gained from writings on post worker movements.

Postworkerism[13] is, in short, a political and intellectual movement by a group of largely Italian scholars to (re)engage with the concepts of labour, wage, income, social cooperation as discussed by Marx in various publications. Divergent research and political paths have been trodden by these scholars, but there is a recent convergence of sorts amongst these scholars towards an idea that the evolution of capitalism contemporaneously represents a new and indeed pervasive relationship between life and capital (Corsani, 2007). Hardt and Negri (2000) refer to this relationship as biopolitical labour, whilst Marazzi claims that it is inherently violent (2010), has an exclusive language which constrains and (re)defines communicative practices (2008). Corsani distils these positions claiming that representative of the "biopolitical" economy and production (2007: 107).

For Hardt and Negri (2000) biopolitical modes of production are symptomatic of a biopolitical economy which involves increasing degrees of autonomy of workers, which when construed in capitalist modes of production presents a new form of labour struggle, and a new form of class struggle. Central to their arguments in *Empire*, is a tracing of a global reconfiguration of labour triggered by increasing trends of companies towards processes of globalisation and it is through this process that which previously resided outwith capital is now subsumed into the network of capital. It is during this subsumption that new labour struggles arise, as emotional experiences become subsumed by capital, evinced by the importance ascribed to immaterial labour in contemporary modes of production (Hardt and Negri, 2004) and develops a category of

[13] Postworkerism is also referred to as Italian Workerism and Autonomous Marxism, although these labels can be problematic in that Autonomous Marxism engages with underlying emancipatory impulses in Marx's writings as writers on Autonomous Marxism stress potentialities for workers to radicalise work processes and thus force changes in the capitalist modes of production, whilst Italian Workerism tacitly reinforces class divisions and hence replicates class struggles by celebrating the class divisions. Hence postworkerism is used throughout.

affective labour (Hardt and Negri, 2000; 2004), where work is aimed at producing or manipulating specific emotional effects. Hardt and Negri (2004) offer the example of fast food workers as an illustration, as their service with a smile can be recognised as an affective labour in that emotions now play an important part in both the labour and customer experiences, as the smile is both expected by customers and demanded by employers to signify maintenance of cultural aesthetics and taste, as discussed above through immaterial labour. Immaterial labour, then, can also be a form of affective labour.

It is perhaps here that strategies of value creation have replicated such biopolitical concepts of labour and economy. When read through Hardt and Negri's framework (2000), the "new economy", through which value creation has facilitated the widening of management accounting's focus, becomes a bioeconomy of production in that endeavours of intellectual capital calculation and reporting continually seek to transform both material and immaterial work practices into numbers that can be managed and hence controlled (*cf.* Roslender and Fincham, 2004). Similarly, under biopolitics, there is a blurring of the divide between capital and life, and the existing gap is extenuated through calculative means of capturing creativity and (re)postulating such endeavours as means to achieve forms of organisational control. Accounting, under these insights, is implicated in this process as being subservient to the needs of capital over labour, and management accounting specifically can capture information for management control. This is not a new argument and has appeared in the literature in various guises; to be sure, Bryer (2006) has previously argued that accounting is involved in labour struggles as the emergent forms of calculative practice act to assert control over the labour process, and is linked with shifts and developments in capitalism.

Immaterial labour and general intellect are linked under postworkerism; Boutang (2001: 9) claims that by viewing this as cognitive capitalism, it is possible to visualise as a new type of exploitation - living labour produces living labour which lives through living labour, consequently, living labour is not easily reduced to instruments or categories of capital and machinery; cognitive workers have thus more power than workers who are technicians of material capital. Immaterial labour then is not seen as the dialectic pairing of im/material labour, but as a new way of deploying the material. Dowling *et al.* (2007) conceptualise this immaterial means of deployment of the material as non-tangible commodities; under their discussion, service with a smile as discussed by Hardt and Negri (2000) is transformed in commodity communication and whilst the immaterial cannot be touched they contain some fundamental characteristic of materiality: knowledge, for instance, is significant to deploying the means of material. Thus there is a clear sense within postworkerism of the immaterial becoming material. This is reflected in 'softer' metrics and the attempts to quantify such immaterial commodities or immaterial labour practices as worker know-how and their knowledge of work processes which is codified as a means of value creation in intellectual capital management and becomes subject to the domain of calculative logic and thus managerial control. To be sure, this is evident in the cases presented here, particularly as the rise of softer metrics were seen in both organisations as fundamental to deriving efficiency gains which could assist recovery, and in the long term perhaps lead to value creation. In a reductive form of analysis here, it appears that the factors of production have been expanded to include immaterial forms of labour, and the role of management accounting has been extended, through VCMA, so that measures can be developed with the intent purpose of capturing these forms of immaterial labour. The role(s) of accounting in setting the limits of economic activity: accounting is purposive towards the end of profitability, and increases its practical catchment to the immaterial.

However to end analysis here would be frightfully nihilistic, and would not be very "critical" nor would it engage with the emancipatory undertones of a critical realist framework. Returning to earlier arguments on counter accounting as a form of emancipatory accounting, insights can be gained into countering, or subverting, these contemporary forms of calculation and control over labour. In response to these concerns it is possible to envisage a resistance through the inversion of immaterial labour capture. Or even by acknowledging that value can perhaps be reclaimed for the customer – which could negate the sticky wicket of co-creation also, which has been utilised in both marketing and accounting contexts as the base of forming long term customer relationship (Cova and Dalli, 2009), and for promoting interests of customer self-accounting and for promoting interests of IC self-accounting.

Within the social accounting literature, for instance, silent and shadow accounts have discussed (Dey, 2007) practices that offer counter informational content to existing corporate social reports. These types of accounts are narrative in nature and expose areas of social performance that are either contradictory, in cases where organisations might claim above average performance whilst simultaneously masking human rights abuse or employee neglect, or even incorrect. The political intent of silent and shadow accounts is to balance information content such that the emphasis of organisational content is mostly positive, and in some extreme cases self-congratulatory, but the content lacks external verification via external social audit. In these instances, silent accounts are offered to show areas of performance that are poor and comprise a mixture of information that exists in the public domain alongside information that is available on company websites (or in previous annual reports) but has not been utilised in constructing social disclosure owing to its negative content. Building on this approach, it is possible to advance here a counter self-accounting, for both customers and employees, where dominant value extraction practices can be challenged by providing information that is used for the purposes of 'balancing' the exploitative practices of organisations in regard of their customer base and workforce. For instance, engaging with published information on wellness policies, a counter self-accounting for employees could highlight controversies inherent in an organisation's disclosures. Equally this could take the form in a challenge to published metrics on value creation from customer groups, by stressing the lack of engagement with particular customer groups in order to pressure organisations to engage with marginalised customer groups. Whilst these are, no doubt, idealist propositions, I do feel that they offer a significant advancement to emancipatory solutions proposed within the critical accounting literature thus far.

8.4: Conclusion

This chapter closes the analysis of the findings in this thesis. Chapter 3 considered the main theoretical differences between TMA and VCMA, concluding that there are large areas of theoretical similarity between traditional and contemporary techniques, whilst chapters 5, 6, and 7 analysed two case studies on the role of VCMA in practice, highlighting several areas of similarity and disparity in practical elements of both traditional and contemporary management accounting practices. Utilising a critical realist framework, these three chapters examined the practical implementation of VCMA techniques allowing a documentation of accounting change to emerge; one that specifically necessitated further analysis in that contemporary techniques were seen to extend the traditional focus of management accounting. This chapter probed this extended focus and through the continuation of the critical realist framework, the chapter highlighted the prospect of enabling emancipatory social actions by conceiving

VCMA as a social practice. Several possible actions were discussed with the most attention given to the advancement of customer and employee self-accounting. Furthermore, aspects of changing roles of the profession and the professional were highlighted, as well as concerns relating to a perceived dissonance between management accounting theory and practice, reflecting upon the role of academics.

Chapter 9: Conclusion

9.1: Introduction

The primary aim of this thesis is to contribute to research on management accounting innovations and developments in both theoretical and practical settings. Firstly the thesis evaluates theoretical contexts of VCMA in order to address concerns in the literature over uncertainties as to the nature of contemporary management accounting practices, and as such makes a contribution to literature in this area. A key concern within the extant literature is also addressed in this thesis and relates to fears that have been expressed by some researchers that not enough is known, both theoretically and practically, about contemporary MA practices. Lord (1996) for instance questions the very existence of new techniques, stating that they exist in the minds of academics. Whilst her criticism was levied towards SMA, concerns towards VCMA have also been noted, and it is here that the thesis is fundamentally situated: primarily, this thesis is an exploration of developments in management accounting. Whilst novelty, more generally, has been viewed with trepidation by some (as outlined by Cooper and Hopper, 2007) and met with optimism by others (Roslender, 1996) the thesis attempted to examine what might be new, and indeed what may be traditional, about contemporary practices.

This examination has focused on contexts of accounting change dividing analysis into two distinct areas: theory and practice. A plethora of research, whose domain lies outside of the focus of this thesis, has pointed to the continued existence of a theory-practice divide in management accounting, and despite this research having no explicit bearing on this thesis, it would be folly to ignore such a convincing body of literature, particularly as research within practical settings has pointed towards organisational piecemeal adoption of particular aspects of techniques, rather than wholesale implementation. Implicit here is the key recognition of context; that each organisation operates in a specific context whereby particular practical developments might appear appealing, or not, based on a range of contextual factors. Emerging is a sense that techniques, as they are presented in theory, are not always found in practice as researchers expect them to be, and Ax and Bjørnenak (2007) utilised a similar distinction between technical and practical aspects of techniques. This thesis also mobilised such concerns by instigating two divergent foci. The first focus related to developments within a contemporary branch of management accounting: techniques that seek to create value (VCMA). VCMA was compared to the underlying theoretical influences of traditional techniques (TMA) and some interesting points were raised. Specifically, that whilst TMA and VCMA have been presented with competing, and apparently mutually exclusive, logics, both appear to share similarities in their underpinnings, in that threads of neoclassicism permeate both developments. Marginalism is as important for value creation as it is for cost management. Equally, abstraction from context is a key assumption for many VCMA as it is for TMA. Subsequently, the thesis makes a second contribution here by exploring and analysing VCMA through the underlying theoretical influences of TMA. This also responds to the first research question of the thesis: what are the theoretical differences between TMA and VCMA.

This thesis also seeks to gain an understanding of how implementation of techniques produces changes in organisational accounting systems, as well as the operational environment and socio-political context of the organisation. Here, the thesis adopted two research questions: to identify and examine the chief differences between TMA and VCMA in practical contexts, and secondly to explore how VCMA practices are implemented. These questions were responded to through the employment of two case studies. The case studies highlighted that novelty was sought at specific intervals in each organisational context, and in each case, new techniques were adopted in line with stated strategic objectives. From the case studies, the thesis is able to examine a context in which techniques become altered in practice, in addition to providing a platform to probe how VCMA operates in practice, addressing concerns in the literature over a lack of empirical understanding on how contemporary techniques are used in organisations, and another contribution of the thesis is made here. The cases find that VCMA was implemented alongside areas of traditional focus, and that this complemented focus extended the traditional logic of TMA. In addition, implementation also encouraged the spread of accounting logic throughout the organisational leading to a number of changes in organisational processes. Cross-case analysis, presented in chapter 7, reveals that the implementation of contemporary techniques also stimulated a greater level of cooperation between departments.

The final research question of the thesis concerned the nature and extent of social-political changes arising from the adoption of VCMA, and by drawing upon a critical realist methodology, that incorporates agency and human actions, an understanding of how implementation can have socio-political effects was documented. The CR approach assisted with the incorporation of agency issues, which is often missing from conventional research upon accounting change. To that end, implementation of VCMA encouraged a shift in employee attitudes towards customers in EquiGrow, and led to some resistance against non-financial measures of performance of employees within SSI. Viewing change through the critical realist framework, specifically by employing the analytical dualism of structure-agency, it would also possible to highlight how agents (both individually and collectively) may enact structural constraints through their support of, or their resistance to, aspects of change. The analysis presented in the opening to chapter 8 therefore identified that managers and senior organisational participants in both case organisations enacted structural constraints to shift the burden of recovery on to other employees and organisational participants, and also to gain more organisational control through the increased measurement capacities of adopted VCMA techniques.

Owing to the commitment to emancipatory analysis that underpins recent conceptions of critical realism, this thesis also engaged with traditions of critical accounting in order to evaluate potential emancipatory avenues within the case studies. Indeed, whilst the cases revealed that VCMA was adopted alongside TMA, to the extent that both areas were observed to co-exist, the fears raised by some researchers were also uncovered. Purposely such trepidation related to the potentially repressive nature of contemporary practice. This presented an opportunity to explore the socio-political context of both case organisations in more detail and hence to respond to sub-question 4.

Criticism has also been levied towards critical realism for a lack of engagement with emancipatory theory, despite its apparent commitment to emancipation, and so the thesis attempted to rebut this criticism via a pairing of critical realism with critical accounting in order to explore how the repressiveness of novelty can be assuaged somewhat, and therefore respond to sub-question 5 of the thesis.

A further contribution was made in this area, as discussions sought to refine aspects of emancipatory praxis as debated within the critical accounting literature. To that end, notions of orthopraxis were highlighted, in addition to proposing theoretical advancements to the concept of self-accounting, which has been present in the critical accounting literature for shortly under a decade.

The remainder of this chapter recapitulates the main findings of the research and outlines these contributions in some more depth. This chapter concludes the thesis and identifies limitations within this study, as well as suggesting areas for future research, recommending that more studies investigating management accounting in practice be conducted. The motivation for the research stemmed from an interest in the difference between management accounting theory and practice and the gap that exists between the two areas, especially with regard to new or contemporary techniques. The thesis focused upon the proposed dialectical tension within the literature that exists between the 'old' and the 'new' and questioned the extent to which espoused differences and tensions actually exist, both in the theoretical presentation of techniques, and in their practical application. The next section of the chapter discusses the main research findings

9.2: Research Findings

The thesis probed developments in contemporary management accounting practice, identified broadly by Kaplan (1994) as the new management accounting. Much has been developed since Kaplan coined the term, but the usage of the term was in the spirit of the original, in that it was used as an umbrella term to describe much of the practical developments since the practical context of MA changed during the late 1980s. Of specific note, was more recent concerns of how management accounting can create value, and it was along this line that enquiry proceeded. The literature on contemporary practices portrays a dialectical tension that exists between the traditional and the new; innovative practices are deemed to be relevant for the modern business environment, punctuated through the widespread instances of the term knowledge economy, whilst older or more traditional techniques are described as not fit for purpose. Since there is a widely acknowledged lack of research in this area, the key underlying theoretical characteristics of these contemporary practices were compared to the underpinnings of traditional management accounting in chapter 3.

9.2.1: Theoretical Contexts of VCMA: Key Differences

The first research question was to explore the key theoretical differences between TMA and VCMA. This stemmed from a desire to address the mixed findings presented by varied research claims that contemporary practices are simultaneously non-existent (Lord, 1996), have an evolutionary focus (IFAC, 1998), key drivers of success in modern economies (Edvinsson, 1997), and exacerbate undesirable effects (Cooper and Hopper, 2007) when compared to traditional practices.

Following from the discussion of SMA in chapter 2, some key management accounting techniques of VCMA were discussed and analysed in chapter 3. The evaluated techniques related to notions of the following: strategic cost management, firm valuation models, customer accounting, human resource accounting, and intellectual capital. Each of these areas were representative of the borrowing of management accounting from other disciplines (*cf.* Baxter and Chua, 2003), in that varied schools of thought had impacted upon the development of contemporary practical techniques, for instance advances in psychology, financial management, economics and industrial relations, were heavily linked to developments in the area of human resource accounting. The techniques evaluated under VCMA all shared the same emphasis on the creation of value for shareholders, per the wider remit of VCMA, in that effective control of resources is necessary to create value.

The underlying influential assumptions of neoclassical economics which are widely cited as foundational to traditional techniques were analysed alongside the value creating practices discussed in the earlier parts of the chapter.

To varying extents, strategic cost management, customer valuation models and firm valuation models could be said to be more influenced by the assumptions of neoclassical economics than practices of intellectual capital. However IC metrics were also heavily grounded in key assumptions of economics. It is evident that there are clear areas where commonalities exist between traditional and contemporary techniques. For example, consider all techniques share the assumption of rationality, in that within each technique there is the same assumption that the decision maker acts rationally and in such a manner as to maximise company profits. Whilst the emphasis was changed under some contemporary techniques from profit to value, this represented only an apparent shift, as the techniques contained targets to adhere to in order to maximise value for shareholders. Furthermore, common to most VCMA techniques were shared assumptions on constant real incomes, no cost of information and determinate solutions. In this sense, there is very little to distinguish, on a general level, between VCMA and TMA, as theoretically, they are still guided and influenced by assumptions of neo-classical economics. Whilst VCMA has an emphasis to deliver value, this often translates to shareholder value. The objective of maximising shareholder value can be equated to the objective under TMA of maximising company profits, and so in this sense, contemporary forms of management accounting also, at least on a theoretical level, encourage the dominance of capital in labour processes and maintain prevailing organisational conditions. It is tempting to conclude thus, however it would be highly presumptuous to do so.

By reference to community conceptions of a stratified management accounting practice, the practical aspects of value creation were then evaluated in two separate case studies. This part of the research process examined how the adoption of contemporary or new techniques affects the organisation, and drives change internally. This is discussed next.

9.2.2: Evaluating practical contexts of value creation

The second and third research questions related to understanding the chief differences between VCMA and TMA in practical contexts, as well as analysing how VCMA practices are implemented in organisations. This was undertaken through a critical realist framework that centred on VCMA implementation in two organisations.

Owing to the critical realist framework, accounting was conceived as an event necessary for change, in that a shift in the technical focus of accounting was theorised to evince changes in the operational processes and procedures of the organisation, such that the implementation of a new accounting technique necessitated new information collection mechanisms, and would also instigate changes in the daily practices of employees in the case organisations. Moreover, by conceptualising accounting as an organisational routine, causal links between the functionality of accounting could also be mapped with organisational shifts. This enabled an examination of how VCMA practices might be implemented in organisations, and to explore the consequences of organisational change resulting from VCMA adoption. The findings of the cases are presented below.

EquiGrow

The first case study evaluated notions of accounting and organisational change within EquiGrow, a UK subsidiary of a European controlled and owned financial services company whom offer insurance, pensions and investment products. One of the major drivers of change in EquiGrow was the decision to upgrade the IT systems coupled with the implementation of an enhanced customer valuation model. The decision to use the more sophisticated model stemmed from the European parent’s decision to undergo an expansive growth strategy. This interacted with the accounting function of the organisation through wider implementation of several value creating models; performance metrics were used to monitor growth targets against stated targets.

Through this strategic focus on growth and value creation, the actual management accounting practices of EquiGrow changed slightly to represent notions of value added – for instance the shift from models measuring customer lifetime value to hybridised measures of lifetime value and customer equity was driven to capture sources of value creation and value destruction within particular customer groups and market segments, and it was felt by financial analysts and the senior accountant in EquiGrow that the hybridised models were more accurate than the models they had used previously. Value added was also represented in shifts toward increased instances of human resource accounting within the organisation, evinced by interfunctional cooperation between the HR function and the accounting department in their coupled venture to provide more detailed feedback and monitoring mechanisms to assess the success of targets and objectives for employees across the branch. This was said to have brought about changes in the daily routines of most employee groups, but perhaps the greatest change was felt by those employed in customer services and those working as claims processors. Furthermore, the European parent initiated a drive toward the production of a value report which was to be used to communicate internal measures and sources of value creation to investors and other interested stakeholders in EquiGrow. The production of this statement again necessitated the wider implementation of comprehensive measures of value creation, such that the sources of value creation could be exposed and detailed to the market.

However, during the second round of interviews, the main driver of change in EquiGrow was arguably the ongoing financial crisis. Committed to the strategy of growth and value creation, EquiGrow also embarked upon a series of efficiency measures in order to curb the value destruction effects of the crisis, which were argued by senior figures in the organisation to be more potentially damaging to the organisation as the effects were perhaps more pervasive upon financial institutions and the banking and insurance industries as a whole. Indeed the senior accountant remarked that because of the crisis it was difficult to meet stated strategic objectives, such as attracting new business.

These efficiency measures represented both instances of organisational change and accounting change. Organisational changes meant the introduction of a series of job-sharing initiatives, and accounting change meant more performance measures aimed at exposing inefficiencies in job processes. The accounting changes were driven by the accounting department and implemented on an organisational wide scale by the HR department, which resulted in weekly target review meetings with a team leader and a team of employees in the claims department. The whole process involved a wider range of 'softer' variables and a deeper focus upon non-financial measures of performance, such as customer turnaround times. Actual performance was compared to benchmarked or targeted performance levels, and deviations from targets were discussed during the meetings. In a strange sense, although performance measurement was more explicitly focused upon the capture and reliance upon non-financial measures, ideas emerged that were common to theories behind the drives in standard costing and variance analysis. To recapitulate; Taylorist influenced versions of SC takes the notion of a standardised version of a cost for an activity, and upon performance of organisational processes, costs actually incurred are then compared to idealised standards, with severe deviations from the standard being investigated and analysed during daily review meetings, where poorly performing teams were asked to reflect upon why standards were not being met. In some cases where standards were being consistently met, these meetings also prompted employees to suggest ways in which job processes could be improved so as to reduce inefficiencies.

Thus in coping with the crisis, EquiGrow returned more explicitly to traditional notions of management accounting and control in order to better cope with the austerity placed upon their industry by a series of streamlining and efficiency measures. Efficiency is central to neoclassical frameworks in TMA, and so is representative of a return in practice to traditional ideas. However, contemporary practices were merged with this return, in that measures aimed at measuring and creating value were also used to monitor efficiencies, epitomising a coexistence of sorts between the old and the new in practice.

SSI

The second case study focused on SSI, a UK subsidiary of a US owned and controlled parent. SSI provides highly customised software and hardware systems for its clients. A range of HRA practices were in place for accountants to follow as well as a heavy leaning upon supplier scorecard systems. Both were viewed as favourable in determining sources of previously unrealised value and led senior management to pursue similar strategies further in the time between the first and second interview stages.

Efficiency emerged as a main concern during the development of the financial crisis, as SSI placed greater value in recovery mechanisms and attempted to find potential sources of inefficiency across process so that cost savings could be made. It was here that value creation was located, as through saving costs and time in processes, value could be (re)gained and assist with recovering from the loss of business brought on by the financial crisis. Supplier scorecards were still being used but in a different mode; whereas before the use of scorecards were to evaluate a range of supplier performance measures, in a post-crisis context, scorecards were utilised in a purely financial manner to exploit cost savings. HRA practices also deepened the focus of efficiency by encouraging employees to reflect on learning and knowledge as potential sources of value growth.

<u>Cross-Case Analysis: Evaluation of differences in practice</u>

Upon a synthesis of case and archival materials, particular common features emerged relating to the usage of VCMA and resulting shifts in practices and experiences of organisational participants. For instance, in both cases the espoused and recognised changes emphasised that a change in measurement bases, through adoption of VCMA techniques, necessitated an alteration to the data collection system. Further data system changes were brought about by subsequent updates to the IT system to facilitate the housing of new non-financial data gathered as a result of increased non-financial measures central to the VCMA techniques adopted.

More commonalties related to the co-existence of VCMA alongside TMA practices in both organisations. Whilst the literature in management accounting stresses that traditional techniques are not fit for contemporary environments, the practices in organisations contradicted this wisdom. In their renewed search for value, VCMA was mobilised along traditional concerns, in that VCMA enabled both organisations to search for deeper sources of value within the organisation, and to assist in stated desires to improve efficiency.

9.3: Socio-Political Contexts of VCMA

The final research question of the thesis is to explore the nature of socio-political relationships prevalent within the case organisations. Through interviews the pre-implementation relationships were highlighted and subsequent changes were further examined in chapter 7, with fuller analysis presented in chapter 8.

Under the critical realist framework, a focus upon emancipatory concerns is encouraged, and this provided the basis for the further analysis within chapter 8. At the local setting of management accounting adoption, a number of socio-political issues emerged in each case, and these were highlighted alongside previous studies on both traditional and contemporary forms of management accounting such that any repressive functioning could be analysed as an enduring concern of practices. Of particular note, here, was the shifting perspectives held by organisational participants to external parties, in addition a further exacerbation of labour-capital tensions was identified and analysed alongside previous empirical studies (such as Ezzamel *et al.*, 2008). Critical realism, as noted in chapter 8, has been criticised for lacking an ostensibly genuine or rigorous emancipatory focus, and so attempts were made to mitigate this through an engagement with two particular areas of research: emancipatory accounting, and postworkerism.

Under the sponsorship of emancipatory accounting research, particular techniques were advanced as potentially providing an emancipatory interest for both customers and employees as both groups were contextually under the scrutiny of accounting measures. A number of advancements were made, but a noteworthy discussion was centred around notions of orthopraxis and self-accounting. It is on this last point that postworkerist insight was utilised in order to promote a politicised form of self-accounting, which was advanced as counter self-accounting.

9.4: Contributions to Knowledge

The exact nature of management accounting developments and innovations continues to be a promising area of research for scholars, yet any conclusive and foundational commentary of their nature remains elusive. Cooper and Hopper (2007) have suggested that MA scholarship continues to examine these innovations at their local setting in order that a greater understanding of the contextual precursors of their emergence can be gained. Similarly, they stress a continued analysis of the enduring features of practice; that by studying the conditions of emergence and indeed the implications of the operationalisation of new practices, that common links across spatial, temporal and organisational contexts can be sought, whereby commonalities can be indicative of general themes or conditions of the meta-practice of management accounting. It is here that perhaps this thesis has made the greatest contribution.

The second contribution has been the employment of a critical realist framework in accounting research. Since the emergence of transcendental realism and critical realism in the extant philosophy of science and method literature in the late 1970s, concepts have gradually appeared in social science and business research, as discussed in chapter 4, but there has yet to be a considered impact in accounting. I have argued elsewhere in this thesis that the nature and themes within CR, notably ontological stratification, lends itself well to research on management accounting change. Ontological stratification, for instance implies a non-scientific formation of knowledge in that with divisions in ontology, it is difficult to assert that knowledge remains the same at each level of observed reality, which contradicts assertions of nomological or scientific knowledge. Consequently, knowledge is seen as both fixed and flexible across ontological strata, implying certain contextuality to its formation.

Relatedly, this thesis has exposed the conditions under which particular techniques have been used and applied by organisations in response to demanding external conditions. The financial crisis facilitated a shift in strategic focus in both case organisations, where value creation was used as a recovery strategy and the use of accounting measures to assist the realisation of this strategic focus is another importation contribution of this thesis; one which was unexpected.

Finally, there is some engagement with critical accounting in order to advance notions of emancipatory accounting practices. In the context of customer and employee metrics, insights were sought which could lead to notions of an emancipatory praxis, whereby customers and employees would be able to escape the oppressive calculative practices that render them malleable to corporate strategy. In this sense, orthopraxis, counter accounting and enabling accounting were discussed and highlighted as potential areas or sources for a form of emancipatory praxis. The major development in these cases was a merging of concerns as determined by counter- and self-accounting respectively, as some theoretical and political adjustments to notions of self-accounting were proposed to enable customers and employees to explore their voice free from the intervention or editing by managers.

9.5: Conclusion and Limitations

One of the key features of this doctoral thesis is the reliance upon a critical realist framework, which espouses a logic contrary to many of the central theses on accounting change, namely that processes are in a constant state of flux, and this emphasis on flux is stressed at the expense of notions of stability in meaning and processes. Traditional perspectives on change, as outlined earlier in the thesis, view change as driven by organisational needs, and labour process theories link change to continuous control over labour. Despite the obvious differences between both of these perspectives, an enduring similarity is the notion of a stable rationale for change, in that the move from old to new, or from tradition to contemporaneity, has a means-oriented outcome. Under these perspectives, successive generations of accounting processes and techniques are the result of a movement across a stable belief or rationale that remains unchanged despite the actual technique. Consequently, there is not the same spirit of purpose or stability in empirical application to accounting, as critical realism is rooted in a limited temporal view of an empirical site that is relevant only at a particular moment in time. Spatial concerns are also relevant here, as spatiality of an organisation can also impact upon knowledge contributions as findings might be related solely to changes in wider socio-political contexts of a particular country, or a particular organisation.

Secondly the case study approach might be identified as a research limitation, in that case studies are deemed to lack generalisability. Steps, however, were taken to attempt to rectify this, and are highlighted in chapter 4.

Finally, the division between theory and practice might also emerge as a limitation; especially when one view this thesis' methodology alongside mainstream approaches which assume a set of stationary circumstances. Notions of flux again emerged as potential limits to this thesis' contribution.

9.6: Future Research

One of the main aims of this research project was to chart the underpinnings of contemporary management accounting practices, specifically in the area of value creating management accounting practices owing to the bemoaned lack of empirical work in this area, as elaborated throughout this thesis. The underlying theories of contemporary techniques are not limited to insights from economics and management accounting, as was the case with traditional techniques, instead insights are multi-disciplinary with advances in consumer behaviour, psychology, marketing, financial modelling, econometrics being important precursors to developments in management accounting in recent years. These inter-disciplinary theoretical progressions enabled an enrichment of management accounting practices, specifically customer accounting, evinced by developments in customer lifetime valuation techniques which were made possible by consumer behaviour patterns and marketing, as well as advances in intellectual capital monitoring and management which was made possible by the increased scope of management accounting systems to include elements that capture softer and non-financial information. However, it is not clear to what extent other disciplines have impacted upon other areas of management accounting practice. Perhaps a fruitful avenue of future research would be to examine this area. Such an examination might reveal that the accounting academic community is not as fragmented as postulated by some (see Gallhofer and Haslam, 1997).

In addition, change itself appears as an enduring concern of management accounting practice. Change, it seems, is an inevitable process as techniques are developed and abandoned. Therefore, it seems likely that some themes introduced in this thesis could be expanded upon with further research. Indeed, the contested nature of change keeps it open for further investigation and ensures that it is a relevant issue for all concerned. Considering that scholars in other disciplines are questioning their underlying principles, such as economics and finance scholars are currently doing in light of recent crises, it is possible to view change as an inherited issue; something that will be possible to debate across disciplinary boundaries. With management accounting change, there will likely be debates as to its contested nature, and it is these struggles that ensure that the discipline will engage in frequent debate.

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Appendix A

List of Interview Participants

EquiGrow – usable interviews

Code	Description/Role	Date: Int. 1	Duration	Date: Int. 2	Duration
SM	Senior Manager	Aug 2008	65 mins	n/a	n/a
HR	HR Director	Aug 2008	65 mins	Sep 2009	60 mins
SAM	Senior Accounts Manager	Aug 2008	50 mins	Aug 2009	60 mins
SA2	Senior Accountant	Aug 2008	60 mins	Aug 2009	65 mins
A1	Accountant	Aug 2008	45 mins	Sep 2009	40 mins
A2	Accountant	Sep 2008	60 mins	Aug 2009	45 mins
MM	Marketing Manager	Aug 2008	40 mins	n/a	
CS1	Customer services employee	Sep 2008	65 mins	Aug 2009	45 mins
CS2	Customer services employee	Sep 2008	45 mins	Sep 2009	45 mins
CS3	Customer services employee	Sep 2008	40 mins	Sep 2009	40 mins
CS4	Customer services employee	Sep 2008	45 mins	Sep 2009	45 mins
FA1	Financial Analyst	Sep 2008	85 mins	Aug 2009	60 mins
FA2	Financial Analyst	Sep 2008	65 mins	Aug 2009	55 mins
FA3	Financial Analyst	Sep 2008	55 mins	Aug 2009	50 mins

SSI – usable interviews

Code	Description/Role	Date: Int. 1	Duration	Date: Int. 2	Duration
A1	Accountant	Aug 2009	50 mins	Apr 2010	60 mins
A2	Accountant	Aug 2009	45 mins	Apr 2010	40 mins
A3	Accountant	Aug 2009	50 mins	Apr 2010	50 mins
A4	Accountant	Aug 2009	50 mins	May 2010	50 mins
A5	Accountant	Aug 2009	60 mins	Apr 2010	60 mins
A6	Accountant	Aug 2009	50 mins	Apr 2010	60 mins

SA	Senior Accountant	Jul 2009	70 mins	Apr 2010	60 mins
ITM	IT Manager	Jul 2009	80 mins	Apr 2010	50 mins
SAM	Senior Accounts Manager	Jul 2009	50 mins	Apr 2010	55mins
MM	Marketing Manager	Sep 2009	40 mins	Apr 2010	45 mins
HR	HR Manager	Jul 2009	50 mins	Apr 2010	50 mins

Appendix B

List of indicative questions

The interviews used a semi-structured approach and engaged in multi-level analysis, such that the questions asked to each interviewee would differ according to their role and organisational function. However, the following structured questions are indicative of themes common to each interview.

1. What is your current role in the organisation?
2. How long have you had this role?
3. Describe a typical working day
4. I wonder if it is possible for you to talk me through a typical process that you would encounter or use daily
5. What, if any, aspects of your job has changed in the organisation?
6. How does this relate to when you first started?
7. What changes have you noticed recently?
8. How has your role in the organisation changed?
9. What sort of measures do you use daily?
10. Why?
11. If you could improve any aspect of these routines, what would it be?
12. How has the organisation changed, if at all?
13. Describe your relations with colleagues across the organisation?
14. How have these changed, if at all?